# MINUTES FOR THE MEETING OF THE COMMISSION ON WATER RESOURCE MANAGEMENT

DATE:

December 10, 2014

PLACE:

West Hawaii Civic Center

Council Building A, Council Chambers 74-5044 Ane Keohokalole Highway

Kailua-Kona, Hawaii 96740

**MEMBERS:** 

Mr. William J. Aila Jr., Mr. Jonathan Starr, Mr. Michael Buck,

Mr. Kamana Beamer, Mr. Milton Pavao, Ms. Denise Antolini

**COUNSEL:** 

Linda Chow, Esq.

**STAFF:** 

William M. Tam, Katie Ersbak, Roy Hardy, Lenore Ohye, Patrick Casey,

Robert Chenet, Paul Eyre, Dan Dennison

**OTHERS:** Karen Nardi (Nat'l Parks Conservation Assn), LeeAnn Crabbe (Queen Liliuokalani Trust), Ken Melraose (Pa'ahana), Mana Purdy, Dwayne Purdy (for U.S. Representative Tulsi Gabbard), William Carmen, Joy Dillon & Susan Lee Loy (Hawaii Island Realtors), Rick Vidgen (Hawaii Island Realtor), Jim Greenwell (Lanihau Properties LLC), Nancy Carr-Smith (Aloha Kohala Realty), Jacqueline Awa (Lanihau Properties), Amy Bircher (Lanihau Properties), Karen Ostlig (West Hawaii Assoc. Realtor), Mayor Billy Kanoi – County of Hawaii, Ann Bouslog (Forest City), Tanya Power (Windermere Community), Kanani Aton (Hawaii DWS), Carl Carlson, Don Thomas (University of Hawaii), Wendy Craven (Haniha/Palani), Mike Maves (Hawaii Water Service), Jon Nishimura (Fukunaga & Assoc.), Mike Matsukawa, Anne Stockel, Austin Easley (The Easley Corp.), Bo Kahui (Laiopua 2020/VOLMA), Mary Begier (Hawaii Assoc. of Realtors), Benjamin Kudo (Counsel for Hawaii DWS), Sue Lee Loy, Vivian Landrum (Kona-Kohala Chamber of Commerce), Dwayne Kanaka, Mary Curist (Alii Real Estate), Sherman Warner, Kaleo Manuel (DHHL), Jobie Masagatani (Chair - DHHL), Thomas Yeh (Counsel RCFC Kaloko Heights), Nancy Burns (Nancy E. Burns PE LLC), Jeffery Seel (Jasminum Farms LLC), Linda Keeling, Courtney Rivera, Shann Makaiau, Elizabeth Maluihi Lee (Kupuna), Kele Makiau Kele, Shelly Mahi (Native Tenant Protection Council), Abel Lui, George Robertson (Office of U.S. Senator Schatz), Hind Sid, Matt Braly (Plumbers Fitters LU675), Hannah Kihalani Springer, Marjorie Ziegler (Conservation Council), Dorothy Bowers, Janice Palma-Glennie (Surfrider Foundation- Kona Kai Ea), Brian Bohard, Stephanie Donoho (Kohala Coast Resort Assn.), Reggie Lee, Elizabeth Lee, Shannon Rudolph, Greg Chun, Keith Unger, Peter Dahlberg (Aina Engineers), Ralph Morita (State DAGS), Roger Harris (Palamanui), Roz Manawai, Max Newberg (HRCC), Glenn Johansen, Riley Smith (Lanihau Properties), Fred Cachola (Na Hoapili Advisory Commission). Mikahala Roy (Na Hoapili Advisory Commission), Barry Francis (Clark Realty Corp.), John Niorse, Abel, Tammy Duchesne (Superintendent, National Park Service Kaloko-Honokohau National Historical Park), Dr. Paula Cutillo (Hydrologist - NPS), Dr. Jonathan Likeke Scheuer (consultant to NPS), Bianca Isaki (Hawaiian Environmental Alliance), Keith Okamoto (Hawaii Department of Water Supply), Duane Kanuha (Hawaii Planning Department), Ann Bouslog (Forest City), Ken Melrose, Stan Fujimoto (Hawaii Housing Finance and Development Corporation), Ken Kawahara

Video and documents also available at: http://dlnr.hawaii.gov/cwrm/groundwater/activities/keauhou/

## A. GROUND WATER REGULATION

1. U.S. Department of Interior, National Park Service, Kaloko-Honokōhau National Historical Park Petition for Ground Water Management Area Designation, Keauhou Aquifer System Area, North Kona, Hawaii

Chair Aila began the meeting at 9:02am. He asked all the testifiers to be polite and respectful of other points of view. He directed that testimony should discuss the agenda item before the Water Commission ("Commission") as it relates to the decision to proceed with the petition to designate the Keauhou Aquifer System Area as a Ground Water Management Area. Chair Aila outlined the agenda for the day. First, the Commission would address the requests for a contested case. Second, Commission staff would do presentation on the item. Third, the National Park Service ("NPS") Hawaii County ("County") and the Mayor will have the opportunity share their thoughts, followed by testimony from other federal & state agencies, public officials, the National Park Conservation Association, and then members of the public. The Chair requested that testimony be kept to 5 minutes so that others can have their chance to testify and when everyone has had their chance then testifiers can come back to finish if they need more time.

Chair Aila entertained the two requests for contested case that were submitted to the Commission. Deputy Attorney General ("AG") Linda Chow provided guidance on the requests. The AG cited the case of Koʻolau Agriculture Co. Limited v. the Commission on Water Resource Management (1996 case) in which the Supreme Court of Hawaii ("Court") found that designation of a water management area is not intended to be conducted as a Chapter 91 proceeding. A Chapter 91 proceeding relates to contested case proceedings. As such, the Court clearly stated that a water management designation should not be done through a contested case proceeding. The Court went onto say that there are no property interests in the designation of a water management area because the determination in the proceedings relates to the overall threat to the water resources. Therefore, it is not a decision that relates to the particular rights of individuals interests. Any property interests that may be affected by designation would be addressed in the permitting stage. The Koʻolau Ag. Case clearly states that a contested case in not required in connection with a decision related to the designation of a water management area.

Chair Aila took both requests at the same time and invited the County and the representative from the RCFC Kaloko Heights development project to respond to the statement made by the Deputy AG.

Thomas Yeh, the attorney for RCFC Kaloko Heights, said in addition to the request for a contested case he submitted written testimony that highlighted the various entitlements, commitments, and invested rights that RCFC Kaloko Heights and its predecessors have invested in over at least two decades. Investments in construction costs and water facility charges totaled about 8.217 million dollars. RCFC Kaloko Heights has all the land use district classifications, zoning entitlements, and are proceeding for subdivision approvals. So from a property interest perspective, the various discretionary approvals to be obtained have already been obtained. He has looked at the Koolau Case (1996) and said he agreed with

the AG on what Court is saying. However, their position is that Chapter 91 is a proceeding that affects the rights, duties, and privileges of a party.

At this point Mr. Yeh's testimony was interrupted by conch shell blowing.

Mr. Yeh then continued that substantial investments and reliance have been made from a property interest perspective financial investments have been made that create a situation in which designation could create a very long process that changes the rights, duties, and privileges and the course of the development. He hoped the Commission denies the petition. As a landowner with property rights, and given body of law from the U.S. Supreme Court, there is constitutional due process, not only the Court. The facts of the Koʻolau Case are different. They understand the water use permit process could take another 10 years and could affect existing rights as of now.

Chair Aila invited the Hawaii County Department of Water Supply ("HDWS") to comment on their request for contested case. Ben Kudo, representing the HDWS Board of Water, said he respectfully disagreed with the AG's opinion on two grounds. First, the Court in the Ko'olau Case rendered a decision that cited policy issues that reflect "dicta" or a statement of opinion or policy that carry no weight. The sole issue before the Court was whether the lower Circuit Court made the correct decision. The Ko'olau Case is not binding on the Commission or any party. Secondly, Ko'olau Ag. was an individual land owner. Mr. Kudo said he is representing the County. The County has property interests and a public trust duty to protect the water resource and put it to beneficial use. 28,000 customers must be served by the HDWS system. HDWS is also responsible for a variety of planning and distribution system issues all of which are property interests that would be affected by designation of the Keauhou Aquifer System. As a party, the County is distinguishable from an individual landowner. The County's duties and rights are much larger than an individual landowner and serve the public interest. He cited another Supreme Court case of Life of the Land stated standing and contested cases should be freely allowed. As designation is a public process, contested cases are part of that process. As a public agency it is in the public's interest to entertain the County's request for a contested case.

Chair Aila asked the commissioners to make a decision on the contested case requests.

Commissioner Starr made a motion to deny the requests for a contested case.

Commissioner Antolini seconded the motion.

Commissioner Starr commented that a contested case hearing was not envisioned as part of the designation process. The Court's decision affirms this.

Commissioner Pavao suggested that the AG review the requests for a contested case based on the testimony just presented before a final decision is made and that to decide today would be premature.

Commissioner Antolini said neither petitioner mentioned the Ko'olau Ag. Case as part of their written request for a contested case. This would have been the opportunity to present their written arguments as

to why it is distinguishable; therefore, based on the written record the Commission does not have a basis for distinguish the Court's opinion and she agreed with the AG opinion for Koolau Ag. The law seems pretty clear and the reasons for distinguishment have not been well presented.

MOTION: (Starr / Antolini)
To deny the requests for a contested case.
Aila, Starr, Antolini, Buck, Beamer = aye; Pavao = no

## **STAFF PRESENTATION**

Chair Aila called for staff's presentation.

Roy Hardy (Hydrologic Program Manager, Ground Water Regulation) started the presentation by summarizing the staff's recommendation.

- 1. Given the complex, but still incomplete information and record in this matter, the importance of the issues, and the Commission's legal and fiduciary duties, it would be inappropriate to dismiss the Petition at this point.
- 2. The Commission could decide to go forward with the designation process and direct staff to schedule a Public Hearing in early 2015 in accordance with the requirements of the Hawaii Water Code.
- 3. Therefore, in light of the record and proceedings to date, and the Preliminary Findings of Fact, the Commission should consider extending the investigation and study period:
  - a. To allow important and ongoing hydrologic studies of the area to be completed.
  - b. To provide additional time for full consultation with affected parties regarding the planning and sequencing of high-level water infrastructure issues discussed in the Preliminary Findings of Fact,
  - c. To allow further time for NPS and the County to explore alternative paths of action as suggested by United States Senator Schatz, and
  - d. To further investigate the multiple and unresolved projections of future water demand in the area and "authorized planned uses" as defined in the Hawaii Water Code.

Mr. Hardy gave a PowerPoint presentation to help with the detail of the submittal and the Preliminary Findings of Fact ("FOF").

Mr. Hardy noted the NPS petition is to designate the Keauhou Aquifer System Area ("KASA") as a ground water management area. He went over hydrologic details of the KASA and the history of the petition and that a ground water management area requires additional regulation where ground water use is approved through additional ground water use permits. He described the process of designation and

identified we are currently in the continuation decision phase of the process. He highlighted the Commission's past decision to extend the initial 60-day decision for further investigations and the clarification of a gap in the process timeline between a Commission decision to continue the process and the subsequent chair final recommendation action. He clarified that there are two Findings of Fact (FOF); 1) a *Preliminary* FOF to help the Commission with today's decision and 2) a *Final* FOF. We are only at the *Preliminary* FOF stage. There is a timeline gap should the Commission move towards continuance, public hearing, then the Final FOF to allow more time for further investigations, if needed. There has been a lot of testimony about designation submitted in the last two weeks alone, which has been provided. Again, the Preliminary FOF is to help the Commission with its decision on continuance to be made today. If a decision to continue is made, it is when the Final FOF is produced along with a chair recommendation for action that the Commission has 90 days to make its final decision, so the final decision is not as immanent after the continuance decision today as previously described in past meetings.

Mr. Hardy continued by describing the Keauhou Aquifer System Area relative to the NPS area. He presented the map from the petition that summarizes NPS's concern about development around the park and the possible impacts of future pumping from development around the Kaloko-Honokohau National Historical Park ("Park"). Professional hydrologists, the Park, the County, and others have been involved in working ground and roundtable discussions about Kona's water resources since 2007, so the issues are not new. Also, there have been further discussions with the professional group about Keauhou sustainable yield updates that were part of the Commission's 2008 Water Resource Protection Plan (WRPP). There has been increased monitoring and the extension of ongoing studies in the Keauhou area since then as well. He cited the other ongoing studies and noted there is another pending update to the WRPP to be finished, hopefully, by the end of 2015.

Mr. Hardy then described that when a petition for designation is filed, the Commission shall consider the 8 criteria as defined under the Water Code. The Commission is not limited to just these 8 criteria. The decision is discretionary and he clarified that if one or even all of the criteria were met it is not an automatic designation. On the other hand, if none of the criteria are met the Commission is not prohibited from deciding to designate. He went over each criterion that may be used to justify designation. No merit decisions on the criteria were being made at this point of the process.

Mr. Hardy summarized staff's understanding of the NPS petition positions that argue and appear to meet 5 of the 8 criteria.

Mr. Hardy went into the facts as we know them today. The sustainable yield ("SY") of the Keauhou Aquifer System Area (KASA) is 38 million gallons per day ("mgd"). However, the new and best recharge estimates seem to indicate that SY could be as high as 80 mgd. This includes the last 30 years of rainfall study updates including future climate change scenarios. There are between 87 mgd to 183 mgd of recharge within the KASA. This does not include underflow from adjacent aquifer system areas. Even if the aquifer was pumped up to the SY, significant coastal discharge would continue. Mr. Hardy went on to describe the SY and pumping trends based on all the data staff has been collecting from all the wells within the KASA even including data since 1960. Currently, the 12-month moving average is 15 mgd, or 39% of the sustainable yield of 38 mgd. There is a consistent trend of 341,000 gallons per day per year

increase over the past 44 years. It would take 67 years to reach sustainable yield if the trend continues. He further described the differences in pumping between the basal (9 mgd) and high-level (6 mgd) and localized pumping showing pumpage in the basal is concentrated in the south by Kahaluu Shaft, which accounts for the salinity problems there, while the high-level pumpage has been evenly spaced in the northern half of the KASA.

Mr. Hardy then moved onto future pumpage. He used a figure from the NPS petition to show various possibilities. The largest and worst case estimate is from the General Plan for full build-out, which suggests projected demand of 175 mgd. He also clarified the differences in demand between agricultural vs. urban needs as shown in the chart. 175 mgd would serve 1 million people in the Keauhou Aquifer System Area (KASA). From consultations with the County and what the County presented to the Commission at its November 19, 2014 meeting on Oahu, a graph was provided summarizing what they believed to be authorized planned use and a list of commitments provides a better estimate of projected demand. This is similar to what was done for the Maui Iao designation proceedings in the past. Based on that information, estimated pumpage would be about 20 mgd. Population growth extrapolations were also provided. Both projections seem to indicate that by the year 2030 the projected demand in the KASA would be 20 mgd. Additional information has also been submitted by the Department of Hawaiian Home Lands ("DHHL") through a reservation request and the State through its 2003 State Water Projects Plan ("SWPP"). DHHL is projecting a demand of 3.5 mgd and the SWPP provided an additional 5 mgd. If the projected demand for the County, DHHL, and the SWPP are added together, the overall projected demand for the KASA comes out to 28.5 mgd by the year 2030. This may include double counting, but to be conservative staff assumed the worst case scenario of no double counting.

Mr. Hardy also showed the anticipated impact on the basal aquifer from high-level pumpage. HDWS has plans to shift pumping from the basal aquifer to the high-level aquifer. The location of the high-level wells will be important. Part of the petition and concern is the location of the wells and the impact on the basal lens. He described the flow lines as presented through isotope studies and the Department of Health's Source Water Assessment Program (SWAP) model, and the probable flowpaths between the high-level and basal portions of the aquifer. This provided staff to do an analysis of separating the regions of high-level and basal portions of the aquifer to attempt to estimate a relative connection between the two areas. The local recharge of the high-level aquifer is estimated at 47 mgd and 8 mgd for the basal aquifer area. The preliminary isotope studies looking at the composition of the water and suggest that 30 percent of the total basal aquifer quantity is from the local 8 mgd of recharge. Therefore, 8 mgd is only one-third of the total flow through the basal aquifer, which would be 26 mgd. The isotope studies from Fackrell and the USGS came up with 50% of the local basal recharge is coming from the high-level aquifer. Therefore, overflow from the high-level to the basal would be one-half of the 26 mgd, or about 13 mgd. Therefore, it appears that isotope information to date indicates that roughly a quarter (1/4) or 28% of the high-level recharge goes into the basal aquifer. Thus, pumping from the high-level would decrease the amount of recharge flow into the basal Park area by about a quarter of that pumped in the high-level.

Commissioner Pavao pointed out that the total recharge is much greater than the SY.

Mr. Hardy agreed the recharge is much greater than the sustainable yield. The point is that not all of the recharge at the high-level goes into the basal aquifer. It looks like 28% is going into the basal based on the isotope information and staff analysis. This percentage affects both pumpage and recharge from the high-level to the basal aquifers.

A member of the public (Abel) interrupted the presentation and Chair Aila asked that he wait until the Commission opens it up for public testimony. At this point only the Commission can ask questions.

Mr. Hardy continued by switching to the Findings of Fact document to show additional figures and charts. The 28% figure seems to be consistent with other observations over the years showing the presence of the deep freshwater aquifer and perched high-level aquifers. It is not 100% or 0% high-level recharge going into the basal aquifer but rather a combination of perched aquifers going to the basal and some high-level water going beneath the basal aquifer.

Mr. Hardy went on to discuss an issue with staff that really hasn't been brought up in the petition and speaks to the criteria concerning declining water-levels, which is a concern to staff. There are a number of wells where the staff monitors water-levels in the high-level aquifer. He discussed FOF figure 15 showing the declining trend in rainfall over more than 50 years and the monitoring wells showing a declining trend in the high-level aquifer water-levels over the past 25 years various high-level wells. Also, it is important to keep in mind that the rainfall declines have already been worked into the recent recharge estimates. The presence of perched aquifers and the fact that most of these wells were drilled before the 1997 Hawaii Well Construction and Pump Installation Standards (HWCPIS) means there may be cross connections between the perched aquifers and other aquifers that are now not allowed under the HWCPIS. Also, there is leaking or wasting of freshwater from artesian conditions of the deep monitor well where the deep freshwater is leaking up into the salt water beneath the basal aquifer. The State is guilty of this at the Keopu Deep Monitor Well. But the leaking from the high-level perched aquifer wells is a another concern. Future wells that follow the HWCPIS will prevent these past cross connections between aquifers. The current trends of the high-level decline suggest we have time, perhaps 100 to 200 years before they completely go down, to observe if the declines are related more to the decline in rainfall rather than faulty well construction. This is assuming rainfall doesn't increase, which is what the climate models suggest for Kona. More investigation is needed to determine the impact of perched water and the interconnection between the high-level, perched, and basal portions of the aquifer.

Commissioner Pavao asked if the decrease in water levels was directly correlated with the decrease in rainfall.

Mr. Hardy replied the exact ratio has not been determined by regression type analysis, but there is a relationship.

Commissioner Beamer asked to go back to the slide of the authorized planned use and if the full build out scenario was part of an approved plan.

Mr. Hardy answered "yes." It is part of the County's General Plan.

Commissioner Pavao asked if the General Plan is the authorized planned use.

Mr. Hardy replied that is the question that the Commission must grapple with. Authorized plan use has been dealt with in different ways. For example, the Oahu Community Development Plan, which is another authorized plan at the time when the Water Code was passed, used to have individual projects with projections. That no longer occurs. In that sense, the full build out scenario is not part of the authorized planned use as they have moved away from project specific to more holistic ideas. It is difficult to determine the actual water needs when the planning scenarios are vague and not project-specific. In Keauhou, the TODs, or the Traffic Oriented Development, it is hard to quantify the water demand from those concepts as opposed to individual projects. In the Iao (Maui) and Lanai designation proceedings, projects were listed to come up with numbers that were more probable. The county has tried to do that and with the addition of other issues (namely Department of Hawaiian Home Lands (DHHL) & the State Water Project Plan (SWPP) needs) the range of 23- 28 mgd number presented today would appear to be authorized, but again it is up to the Commission to decide what is authorized.

Commissioner Starr asked if unused reclaimable wastewater was considered "waste."

Mr. Hardy said that has never been a definition used in the past with the Commission. It is a resource, but we are only talking about the waste of the natural ground water resource. He added that a lot of ground water that gets used for irrigation is sometimes considered waste, but that goes back into the ground, even cesspool water. So, the use demands counted against sustainable yield are being treated as though 100% of use is going to the ocean when in reality it is not. This is a conservative approach for the [90%] use criteria.

On that point, Mr. Hardy turned to the salinity criteria as return irrigation has implications to the concerns brought up in the petition. It is really only a problem in the south with the Kahaluu Shaft, which the Commission visited. Moving pumpage to the high-level and spreading it out is important.

Commissioner Starr understood spreading out the pumpage is essential asked about the proposed high-level wells and wells being drilled by private developers for their projects that are yet to be built. He asked how these wells fit into the HDWS scheme of spacing the wells. It seems to create a dichotomy. Will the new sources provide water to the older users who relied on the older salty basal sources?

Mr. Hardy said it's an interesting question probably best answered by the County. He suggested the County has two tools it can use to control how water is developed and used. One is to control the spacing through agreements and how these new sources tap into their infrastructure, which they know better than us. Second, and probably more importantly, the Water Use and Development Plan ("WUDP) that is the integration of development plans and water use to where the growth and supply will occur can address the question too. In the future, Commission staff would like to approve well construction permits based upon on the WUDP, but we're not there yet.

Commissioner Buck asked if the WUDP was being updated for 2015.

Mr. Hardy answered "yes."

Mr. Hardy turned to the criteria of serious disputes and suggested that the 3-Dimensional model from the U.S Geological Survey will help with the conceptual model issue and the nearshore leakage salinities. Also, what we are finding from the local biologists and biologists within the department is that the one species that is at risk from increased salinity is the damsel fly. All the other native species in the Park are euryhaline meaning they have adapted to a wide range of salinities, which naturally occurs in the coastal waters. This is a good sanguine with the traditional and customary issue raised by the Park in that we don't see a nexus with the damsel fly and customary practices that are part of the public trust.

Commissioner Starr asked if the native Hawaiian yellow faced honey bee was part of the discussion on culture and native species. They are disappearing all over due to a mite and the only place he's noticed them thriving is at the anchialine ponds at the park.

Mr. Hardy responded that he was not aware of any issues with the honey bees. Traditional and customary practices do occur at the Park. However, one of the fishponds, the largest one, is a protected wetland and traditional and customary practices are not currently allowed. This is contradictory to the points raised by the NPS. There is also the issue of maintaining the ponds, such as taking out invasive vegetation and fish. To help get rid of the invasive mosquito fish that affect the opae'ula the use of the pesticide Rotenone would help more than controlling the pumping of wells. So there are other steps can be taken to help the native species in the Park that do not relate to pumping.

Mr. Hardy noted there are legal arguments made in the petition but that will be dealt with separately from the Preliminary FOF is only dealing with scientific facts and do not address legal issues. So that concludes staff summary of the 8 criteria and recommendations.

Commissioner Buck thanked Mr. Hardy and the Commission staff for their hard work. He asked if non-consumptive uses and other public trust uses are factored into the sustainable yeild.

Mr. Hardy answered no, not explicitly. However, it seems the native species along the coast seem to have adapted to a range of change in salinities. The sustainable yield approach is precautionary as the general approach of the Water Resource Protection Plan is to minimize the sustainable yield as much as possible. If there is better information, monitoring, and agreed upon reasons then it is possible to move away from the minimum. Public trust uses are not explicitly calculated into the sustainable yield but significant recharge is allowed to continue to coastal discharge. 38 mgd is still considered the sustainable yield of the Keauhou Aquifer System Area but more is allowed to discharge to the ocean. Sustainable yield is one way of addressing the protection of the resource. Other means include the well construction and pump installation permits and required pump testing. Any large development wells must do pump tests to assess the impact on the aquifer and neighboring streams. Even without streams, as is the case in Kona, Mr. Hardy cited the example of Kiholo more north of Keauhou where individual wells are desalting the brackish basal wells and CWRM staff is working with the Department of Health to address the disposal of the effluent. Whereas sustainable yield is a big picture method to regulate overall pumpage, these

individual pump tests through well construction permits deal with localized concerns, which is more apropos to localized traditional and customary practice issues.

Commissioner Antolini thanked the staff and parties for all their work and asked what studies are pending and can be concluded for more information in 2015.

Mr. Hardy noted the updates for the Water Use and Development Plan, the USGS numerical model, the Water Resource Protection Plan, the State Water Projects Plan, will probably be ready by 2016 and another ground water recharge update (currently on hold).

Commissioner Starr asked Steve Anthony from the U.S. Geological Survey ("USGS") about the numerical model as he has concerns about the Commission's RAM (Robust Analytical Model) in estimating sustainable yield.

Steve Anthony said USGS in the process of constructing a ground water flow and salinity model for the area surrounding the Park. It has been delayed as new information became available in the past 2 years. In consultation with the NPS the modeling effort has been pushed back so findings can be published based on the best available information. The report should be published by December 2015.

Commissioner Starr asked about funding.

Steve Anthony replied they are funded and have done no-cost extensions.

Mr. Hardy added that the USGS model may help verify the 28 percent staff estimate of pumpage effects from high-level on the basal aquifer.

# **AGENCY PRESENTATIONS**

#### Mayor William Kanoi

Chair Aila then asked to adjust the scheduled presentations to allow Mayor Kanoi to provide his testimony first as the Mayor had a plane to catch.

Mayor Kanoi gave aloha to the Chair, Commission, staff, NPS, and other agencies that have been having conversations on the issues for some time and have provided better information for better decision making. He expressed special aloha to NPS and named various places on Hawaii Island they care for. He is concerned that the dialog is meaningful and respectful as we all share in the same resources. It is offensive the issue is framed as NPS, Environmentalist, Government, Development, which is a false construct. He didn't ma'a (know much) about the Keauhou issue but, as an attorney, he spoke to people, asked questions, and held them accountable for accurate information as does the community and his administration. He understands the need to protect the island and cited his participation in stopping the space port. But he feels there is some paternalism towards the County regarding the Park from others that the County doesn't know what it is doing with regard to water. He would like to see the science, law, and

violation the County does not understand. He would be the first one to go after the Hawaii Department of Water Supply (HDWS) and hold them accountable if they were doing something wrong. He believes it is the County's kuleana to malama, care for, and protect for future generations. He sees a petition that uses words like threaten, degradation, imminent harm, diminishing of resources. Yet, has had discussions with the Park, his staff, and today's Commission staff to understand the resource issues and wondered what the County has done that would the petition and designation by the Commission. The County has protected 200 acres north of the Park thanks to their County Council through a \$6.2 million purchase have protected 217 acres of coastline from development for preservation and conservation. As a lawyer, he sees the 8 criteria under 174C-44 and doesn't see the threat or harm. He hears that maybe the in the future the harm comes and cited the 1 million projected population vs. the current 25,000 population in Kona. He challenged people to ask and shared how difficult it is for a developer to secure water credits and develop wells for the HDWS system. He shared an example of taking care of their kuleana by how they required photovoltaic energy on their county buildings to conserve energy and reduce oil consumption. NPS cannot submit a petition just because they like and think they got the votes, because they are the federal government. The island does not sit in a national park, the national park sits in this community where we all should work together and looks forward to an intense meaningful dialog that includes all the science data and facts. If something is wrong then show the facts. It is not about philosophy, ideology, and political leanings. He is offended when this issue becomes us, them, you, not me. We are all environmentalists and we are all cultural. There are native Hawaiian developments in the urban core that we should support. Access to higher education facilities, which is the great equalizer, is needed in Kona. The Park is a Puuhonua, a place of safety, hope, and learning good values for our children. Water is precious, which why wealth in Hawaiian is wai wai. If the County is doing something wrong, as the Mayor, he would take full responsibility. There are many layers of county governance to protect the limited resource and he holds his administration accountable to the community, not because of law, but because it is their kuleana. As he studied all the information to date, he felt hurt because the petition is saying the county doesn't know what it is doing or cares about the resources. This petition should be looked at through the science, facts, and law. He believed if you do that everything is ok. If not ok and sustainable yield is threatened, then certainly the commission should take action and all the government entities should be held accountable. He thanked the NPS and Commission for this process.

Commissioner Starr thanked the Mayor for his testimony. He wanted to share some perspective and described the Iao Aquifer System Area, Maui designation experience and the long process of designation, the years of contention and fear about designation by an outside force. As it progressed much scientific investigation was done and was a good thing. When Mayor Arakawa came in he and the director of the water supply supported designation and soon thereafter it was designated. Then all the contention, arguments, and fears of losing jobs and unable to build schools stopped. Everything started working smoothly and the science became an integral part of working with the County, Commission, and U.S. Geological Survey (USGS), and everything was smooth from then on. You might want to speak to Mayor Arakawa. The process improved communication and forward movement.

Mayor Kanoi thanked Starr for the perspective, and he didn't think anyone is scared in Keauhou but he would like to see the decision based on scientific facts. He would say the same thing as Arakawa if presented the facts there but unfortunately he can't say that for Keauhou.

Commissioner Pavao began to ask a question when Mayor Kanoi interrupted to describe his respect for Commissioner Pavao's knowledge in water and actions.

Commissioner Pavao continued to say he appreciated the Mayor's testimony especially that it is not a matter of doing wrong but of being hurt, which he understands.

Commissioner Beamer gave mahalo to the Mayor and as a Hawaii Island resident he too regretted that there has been much contention over designation as well. He did not think Commission or anyone is being paternalistic and designation has happened on other islands and people work together. That is what he hopes happens. As a Commissioner from Hawaii Island it hurts to be described as an outsider coming in when it is the Commission's kuleana under the Code. We are only investigating at this point in the process. He asked if the Mayor saw that the County plan would cause the sustainable yield be exceeded by 600% what would be his response?

Mayor Kanoi apologized (kala mai) as it was not his intent to put the paternalism critique on Commissioner Beamer as he didn't file the petition. He has the highest regard for the Commissioners. It wasn't on the Commission but rather the petition. But as leaders we must make tough decisions based on law and science and if there is not enough objective info it is ok to do nothing. If objective and based on science and facts, no need say kala mai. The Mayor tells his water guys that if they misrepresent one fact then they lose credibility in every subsequent issue. The projections given today are maximum build out if everything moves forward. In his 6 years as Mayor he knows not everything moves forward as it is very difficult. Where is the overdevelopment or shaky decisions? So his answer to Commissioner Beamer was to do nothing because no need. If need, he would be like Mayor Arakawa. In two years he will not be Mayor and plans to teach and live in Keauhou and does not plan to avoid eye contact with the kupuna and people from shame if he doesn't make good management decisions. Based on the science right now he feels no need designation, but if need he'd be right back before the Commission to apologize for being wrong.

Chair Aila thanked the Mayor being open and if new information comes forward it may change his stance, and wished him safe travels. The Mayor returned the mahalo to all.

Chair Aila recessed the meeting for 10 minutes and announced that the Park would then make their presentation.

# Nation Park Service at Kaloko Honokohau Historical Park

Chair Aila reconvened the meeting and asked the Park to present their testimony.

Tammy Duchesne, Superintendent of the Park, introduced Dr. Paula Cutillo, NPS hydrologist who would be speaking towards alternatives to designation, followed by Dr. Jonathan Likeke Scheuer, who speak about authorized planned use, finally she would speak to new issues that have arisen since the petition had been filed and the recommendations in the staff submittal.

Dr. Paula Cutillo, NPS, introduced herself as a ground water hydrologist for the NPS Water Resources Division and has worked with the Historical Park since 2005. She briefly described the previous alternative efforts to prior to submitting the petition for designation. First permit conditions, since 2005 they have commented 7 well & pump permits near the park and requested increased monitoring with increased pumping. In 2009 and 2011 they raised concerns about the quality of data being collected from special conditions placed on the Kohanaiki Wells. For Environmental Impact Statements, since 2006 they have commented on 14 projects that would increase pumpage around the Park. In 2007 NPS commented on the Commission's draft Water Resource Protection Plan(WRPP) that the WRPP provide clear provisions to protect the Park from resource impairment. In 2008 NPS convened a Working Groups and held two facilitated meetings and participated in every Kona Round Table meeting. In 2011 NPS raised concerns about the 2010 update to the Hawaii Water Use and Development Plan and based on information in the plan and requested the Chair initiate designation or condition the plan to require a calculation of authorized planned use. Neither request was acted upon and now authorized planned use is being used as a reason to delay action on designation. In 2011 & 2012 NPS briefed the Commission 3 times on the limitations of ground water monitoring and threats to the Park. None of these address the Park's concern of regulating the location of wells and their impact on the Park.

The Park understands the complexity of the ground water hydrology and possible implications on impacts to the Park but cited the Hawaii Supreme Court ruling that the burden of proof rests with the applicant. Water use permits require this site specific proof to protect public trust resources and only exists in water management areas. The water use permit allows the Commission to consider non-consumptive uses of water and site specific geologic conditions when permitting wells. Otherwise, use is simply maximized to the detriment of plants and animals. Designation is a first step towards proactively protecting public trust resources.

Dr. Cutillo pointed out the higher recharge report also indicates in drought conditions recharge would be lowered to 65 mgd, which would lower the sustainable yield to 28 mgd. This would be the conservative number. The Park is concerned about pumping in both the high-level and basal aquifers, especially from existing and future wells right next to the Park. Invasive fish have only been observed in 11% of the Park's anchialine pools. Native species are found in a wide range of salinities in the Park, but the orange black Hawaiian damsel fly and candidate endangered water birds require fresher water at different stages of their lifecycle. The Park wants healthy conditions for these species to reproduce.

Dr. Jonathan Likeke Scheuer testified about authorized planned use (APU), particularly the previous methods used by the Commission to calculate it. The staff submittal asks for an indefinite delay for further fact finding including authorized planned use. He and Bianca Isaki have researched the complex and difficult history of APU and do not believe the delay will accomplish much. APU is really not critical for the designation determination; rather, the determination of sustainable yield and location of wells are more important. However, there are 2 parts to the Code's definition of APU: 1) state land use classification, and 2) county development plan approvals. APU does not say how far into the future to look, it doesn't define a development, and how to calculate future water needed. The Commission has never used the same method twice to calculate APU in the past. Windward Oahu used population growth

scenarios. Iao (Maui) that used water commitments and building permits. It is not clear any of these previous attempts complied with the legal definition of APU. They used the methods for the APUs used for Lanai, Iao (Maui), Windward Oahu, and Molokai designations, applied them to Keauhou, and arrived at a range of 5.2 to 16.8 mgd. These previous methods are significantly higher than the APU of 3.5 to 5.5 mgd suggested by the County. If strict application of the law is used, 16,600 acres of urban zoned land, all of which is within the 2008 Kona Community Development Plan. There are 3 planned transit oriented development and an unlimited amount of traditional neighborhood development possibilities with density bonuses. Apply various water duties, APU estimates could be lower than what the County has presented to many multiples of the sustainable yield. Alternatively, zoning is a more conservative estimate for APU since zoning must be in agreement with state land use classification and county development plans. Just under [urban] zoning, water demand is 103% of sustainable yield. County planning is core for home rule land use determinations while protecting public trust uses of water. So the Commission needs to look at the disconnect between the County's development goals for the area and the amount of water available. If the Commission spends an indefinite time analyzing APU it can come up with any range of numbers that will not be agreeable to all. Instead, use the FOF which did make a finding that, on page 53, "By the time zoning and water commitments are made, there is no planning to be done." So that is the 103% estimate. The Commission can assure the County developments goals can be reached, but only under designation where use is required to be efficient and it meets existing zoning requirements. The staff recommendation to defer indefinitely the decision to continue based on APU estimation is a waste of everyone's time.

Commissioner Starr asked if NPS feels that delays in a decision will cause irreparable harm to the Park.

Dr. Jonathan Likeke Scheuer responded that Superintendent Duchense has prepared remarks to answer that question.

Tammy Duchesne, Superintendent National Park Service Kaloko-Honokohau National Historical Park, said they believe the petition contains all the scientific policy and legal information needed to continue the process. She would some new issues since the petition was filed and offered some comments on the staff submittal. The petition does not seek to stop development or ground water pumping. The petition is pro planning. They would like to see the location of wells to be managed so that economic growth can continue with a robust margin of safety for public trust resources in the Park. Ground water management areas are the only known tool to manage the location of wells. Discussion on designation goes back to 1991 when the Hualalai Water Users Group discussed the possibility. In 2007, NPS started a formal process of outreach to stakeholders and requested the Commission to help form a working group. In 2008, NPS formed the Kona Ground Water Working Group to investigate opportunities to conserve and manage ground water resources around the Park as an alternative to controlling ground water withdrawals. While the Preliminary FOF has numerous errors and inaccuracies, which will be addressed in a response that will be filed, NPS agrees with the submittal where it would be inappropriate to dismiss the petition at this time. The submittal alludes that an indefinite time extension will allow alternate paths to designation to be discovered. NPS has already spent the last 7 years doing this with stakeholders. No one has proposed a legally enforceable alternative management framework to control withdrawals that will protect. In conclusion, the petition contains all the scientific policy and information needed to continue the process. If the Commission extends the deadline,

NPS requests the following conditions of such an extension. One, limit the extension period no later than May 30, 2015. Two, to honor the precautionary principle, the Commission should direct staff to defer approval of pump installation permits in the Keauhou Aquifer until a decision on the designation process is reached. Three, require staff to participate in discussions between NPS and the County that would establish a management framework that would regulate withdrawals to protect public trust resources of the Park. Finally, direct staff to prepare a legal analysis of that contained in the petition. Designation is the only viable framework to protect the public trust resources of the Park and the process should continue today.

Commissioner Buck thanked NPS for their testimony and asked if there was any truth to the suggestion that NPS was not willing to participate in mediation as an alternative to acting on the petition for 90-days.

Superintendent Duchesne replied they have been trying to use cooperative conversations since 2007. However, after all that time we are no closer to a managing the placement of wells other than a water management area. Based on testimony today, NPS does not feel people believe that Park resources are at risk. NPS duty is to protect and preserve resources for future generations. The Park does not feel it can mediate its responsibility and have delays incur harm to their resources.

Commissioner Starr repeated his question again about what would be the irreparable harm to the Park if the process is delayed.

Ms. Duchesne replied that they are asking that a decision be made on continuing the process.

Dr. Cutillo offered a further response in that if the Commission delays the process to put a time limit on it, suggesting May 30 again. But responding to the irreparable harm question NPS is looking to protect the resources as they are and preventing cumulative effects of existing and future wells. They are concerned about the wells at the Shores of Kohanaiki. They have been monitoring the wells and have concerns. The other concerns are with future wells in the basal and high-level portions of the aquifer around the Park. It comes down to burden of proof. If the Commission maintains the status quo it is risking the resources and investments in infrastructure in the future. If you wait for an impact to occur then ask for restrictions on pumping it will be hardest on drinking water needs. NPS wants to avoid that. They are not willing to risk the Parks resources or put other projects at risk. NPS is asking to designate to help plan where wells go so both development can continue with resource protection. Does that answer your question?

Commissioner Starr said it provides additional information.

Dr. Scheuer offered an additional response to will there be harm in delay. He does not how one defines irreparable harm or if that is a legal standard, but NPS believes you have all the necessary information to continue the process today. But if you choose not to continue and delay a decision, then defer any new pump installation permits as that would remove possibilities of harm from occurring during the delay.

Commissioner Starr thanked the testifiers for the additional information.

Commissioner Beamer gave mahalo to NPS for their testimony. He asked about the issue access raised by staff of access to traditional and customary practices within the Park.

Superintendent Duchesne answered that Aimakapa is a nesting bird habitat protecting endangered species and they are legally required to restrict activities. They are doing an EA on that pond for future uses. The rest of the Park practices are allowed and encouraged.

Dr. Scheuer offered an additional response that the submittal is somehow equating access in the Park to unfettered access to all areas in the Park at all times. In the case of the endangered birds this is not the case. Dr. Scheuer also addressed Commissioners Buck's question regarding mediation. NPS has had discussion and peoples' fears are that establishing existing uses post designation would be delayed indefinitely. NPS has been willing to do everything they can to expedite the issuance existing use permits because their concern is with the cumulative impacts of existing and proposed new wells. So NPS has been willing to sit down and talk with people, but they need a framework to do so.

Commissioner Beamer said so there is access for cultural practitioners unless there is some environmental effect at the Park except for sensitive areas and do they know how much is occurring.

Superintendent Duchesne confirmed there some closed areas, but traditional and customary practices are encouraged. They get requests about how much traditional and customary practices are occurring but they are respectful of people's practices so they don't ask or interrupt people and do not have solid data on that.

Commissioner Pavao asked NPS to clarify how high-level pumping is detrimental to the Park.

Dr. Cutillo answered that staff did a good job in summarizing that issue. Wells mauka of to Park will capture water that will discharge in the Park. There is uncertainty regarding how much on the percentage and timing. The implications are lowered water levels and higher salinity.

Commissioner Pavao asked sustainable yield could be one-fourth of recharge yet the Park is still concerned? The other unknown is that how that high-level interacts with the basal, much could be going deep offshore, and there is no conclusive evidence that ponds have been harmed. Scientists have claimed that the ponds are healthy. So how does high-level pumping will affect the Park?

Dr. Cutillo answered that she couldn't add anything more than pumpage will divert and reduce discharge to the Park. She respectfully disagrees that there is no hard scientific data that there is communication between the high-level and basal aquifers. The submittal summarized based on isotopic information that there is some communication. Sustainable yield is only fraction of recharge, but the location of wells are important too. There is a disproportionate amount of wells within the four (4) ahupuaa above the Park such that it is well within the 90% criteria. So the conversations have been to get at how to consider the spacing and location of wells when they are being permitted relative to resources NPS wants protected.

Commissioner Pavao said if that is the case then NPS could work with the County to come up with criteria to address the concerns. He knows for a fact that wells are spaced so they don't interfere with

each other. When he was working at the County the minimum spacing was 2000 feet and if during the well tests there were any indications of interference the wells would have to be spaced farther apart. So those concerns can be worked out without this Commission. He just doesn't understand how the high-level pumping would affect the ponds, which are currently healthy, even with the current pumpage. Sorry.

Dr. Scheuer said he shouldn't feel the need to apologize. To try and answer your questions. First, it is possible the NPS could reach an agreement with the County if they could say no to wells in certain areas. However, and this is hampered because staff has not provided legal analysis of that provided in the petition, in non-designated areas individual landowners can drill without any intention of having an agreement with the Hawaii Department of Water Supply (HDWS), so any agreement with HDWS would not cover all private wells that NPS believes would impact the Park. The issues in the high-level are complicated, staff has done a good job trying to tackle those, but NPS is not just concerned with high-level wells but the cumulative impacts from all wells in the area, including the basal aquifer. This can only be done in a designated water management area.

Commissioner Pavao asked if NPS just wants to designate the basal aquifer. Could you work with the staff to ensure basal wells address the concerns of NPS?

Dr. Scheuer replied that such questions relate to the powers and duties of the Commission and should be discussed in executive session with your attorney general.

Dr. Cutillo added that NPS did approach the staff about designating just the basal aquifer 2 or 3 years ago but were told it was not possible as it is not an official management unit.

Superintendent Duchesne added regarding the health of the ponds it is not ok to wait and see harm then try to mitigate, remediate, respond, and clean it up. If it is harmed NPS could be sued and would have failed in their duty. NPS needs to be proactive in their management.

Commissioner Pavao believed the NPS extent of proactiveness would result in nothing getting done.

Dr. Scheuer replied that the entire aquifer is not a national park and NPS is a different standard.

Commissioner Starr asked if NPS has quantified the number of wells that would impact the Park.

Dr. Cutillo replied that NPS has been working with the U.S Geological Survey (USGS) to answer that question. The first 1999 USGS model developed looked at how wells would reduce discharge through the Park. That model has limitations. First it assumed 100% connection between high-level and basal aquifers, which is not true. The other limitation is that model did not address how salinity is affected. The new model ongoing since 2008 will address the pumpage impacts to salinity at the coast. NPS had asked stakeholders to participate but to date NPS is the sole source of funding for the new model.

Commissioner Starr understood the value of models in other management areas (Iao, Oahu, Waihee) to look at what-if scenarios for different locations of pumpage and how it affects the aquifer. Is that what NPS is doing? How, without management, would one get the data for existing or future pumpage?

Dr. Cutillo replied NPS is looking at what-if scenarios using two models. One in the vertical and another in the horizontal spatial distribution. So when water use permits come in then they can be evaluated on a case-by-case basis. NPS is also concerned about the cumulative effects.

Commissioner Starr asked for future use from private wells.

Dr. Cutillo replied the petition tried that through EISs and other documents NPS has commented on for projects. Those are the red flag for NPS. Many of the developments around the Park are proposing to have wells developed on site, Kalako Makai (5000 homes mauka across the street from the Park) is an example. No one has taken the lead on looking at the cumulative impacts from these developments and proposed pumpage and desalination plants.

Commissioner Antolini thanked NPS for their presentation and asked if they could expand on their timeline of their official response to the Finding of Fact (FOF).

Dr. Cutillo replied the FOF just came out last night and NPS would like time to do a thorough review and work with Commission staff to address inaccuracies or issues of importance but do not have a timeline. It is a priority and will work with a Commission deadline.

Commissioner Antolini asked for a sense of time needed – a week?

Dr. Cutillo responded 30 to 60 days given the holidays.

Dr. Scheuer replied the complexity of the FOF, lack references, and only coming out at 9 pm last night it make it hard to estimate time needed.

Commissioner Antolini turned to the legal analysis requested by NPS and asked how that figured into the process.

Dr. Scheuer repeated that the authorized planned use calculation is not a reason to delay but there are also other legal issues that warrant designation. It is difficult to consider scientific uncertainties absent the legal analysis. NPS has put forth their legal analysis. There has been no response from the staff or other parties. If the Commission decides to delay a decision they should do a legal analysis that NPS can review and the Commission can use with the science and policy to come up with a final decision.

Commissioner Antolini redescribed the answer to be that NPS has framed all the legal issues and want feedback to that.

Dr. Scheuer was hesitant to say all the issues have been raised but a lot of work has been put into the legal analysis in the petition and they have received no written response from the Commission and it would be helpful.

Commissioner Antolini asked if NPS needs additional time is the legal issues in addition to the factual issues.

Dr. Scheuer said they might.

Commissioner Antolini moved the NPS December 10, 2014 letter that had 4 conditions and asked for an explanation for the May 30, 2015 extension date.

Superintendent Duchesne said they would simply not like an indefinite extension given the history of delays since the filing of the petition and what other studies are necessary.

Commissioner Antolini asked about the extension if the timing of other studies was considered.

Superintendent Duchesne said not particularly. Studies like the isotope studies would help with the placement of wells but a decision on designation should not hinge on the study. NPS is essentially asking for an expedited process to continue the process as wells may go in while waiting for a decision.

Commissioner Antolini brought up the second point regarding deferring pump installation permits until a decision is made and asked for more specificity or a list of pump installation permits is NPS asking to defer.

Dr. Cutillo said there is not a specific pending permit they are asking to defer. NPS is anticipating new permits.

Commissioner Antolini clarified then NPS is asking for deferral "if" a pump application is filed.

Dr. Scheuer said that was correct.

Commissioner Antolini asked NPS to further explain the third condition of the NPS letter.

Dr. Scheuer referenced Senator Schatz's letter in the staff submittal noting time should be allowed for NPS and the County to explore alternative paths of action to designation. It is essential that the Commission be included in discussing alternative regulatory schemes as it is the duty of the Commission to protect public trust resources.

Commissioner Antolini followed up asking about ongoing discussions and what is anticipated in those discussions.

Dr. Scheuer repeated that NPS is only reacting to what is in the submittal about the Schatz letter and is asking the Commission staff also participate.

Superintendent Duchesne added that NPS has met with the Department of Water Supply and the Mayor's office and will look forward to further discussions. NPS doesn't want the designation decision to depend on outcomes of such discussions. Commission staff must participate in such discussions. NPS looks forward to discussions no matter what the decision.

Commissioner Buck said he is hearing NPS would be willing to have discussions with the Commission staff and the County to explore alternative paths to designation.

Superintendent Duchesne said NPS is always open to having discussions, just don't stop the process.

Commissioner Buck said he is hoping something positive comes out of the discussion.

Dr. Scheuer reminded the Commission that NPS position is that there is sufficient information to make a decision to continue the process today rather than having additional fact finding. Should the Commission accept the staff recommendation and delay a decision, staff should be part of any discussion on alternative paths to designation.

Superintendent Duchesne added this should all fall within a finite time for the delay.

Chair Aila recessed the meeting until 1:30 pm for lunch.

Chair Aila reconvened the meeting to continue with other agency testimony with the public to follow.

#### Hawaii County Water Board & Department of Water Supply (HBWS / HDWS)

Benjamin Kudo & Deputy Keith Okamoto represented the Hawaii County Water Board.

Benjamin Kudo thanked the Commission for the opportunity to present their thoughts and echoed the Mayor's speech regarding preserving the Parks resources for the community. However, he repeated the Mayor's statement that just because someone wants something doesn't mean they should have it if there are no grounds for having it. Evidence and scientific data are required under the eight criteria in 174C. Their position is that **no evidence has been submitted to the Commission to demonstrate any of the designation criteria have been satisfied**, which the staff submittal seems to indicate. 174C-41 was read: "Where it can be reasonably determined, after conducting scientific investigations and research that the water resources in the area may be threaten by existing or proposed withdrawals or diversions of water, the Commission shall designate the area for the purpose of establishing administrative control." This means it is the protection of the water resources that is behind designation process. The NPS petition is not about protecting the resource, it is about protecting the Park. It's a big difference. The NPS petition is not appropriate for this. Assuming it is appropriate, the penultimate issue is whether the Hawaii Department of Water Supply (HDWS) and County of Hawaii is able to manage the water resources and fulfill its public trust duties. If the County is unable to do this, then it is the Commission's right to designate. Unless the

Commission believes there is mismanagement of the resource by the County, there is no basis for designation of the Keauhou area. Over the record of the past year and a half there is no evidence of mismanagement or incapability to manage the resource properly.

So there are two issues before the Commission. First, there is no criteria met as to threaten the resource; and second, there is no evidence that the County is mismanaging the resource or irresponsible or incapable of managing the resource. The petition should not be before you and should be dismissed.

The County has been willing to discuss the issues of impacts to the Park. Repeated written requests for discussions of the issues to the Park have gone unanswered. The County Department of Water Supply (HDWS) and Water Board remain committed to discussing impacts to the Park. NPS has testified that the outcomes of any such discussions or mediation should not affect the Commission's designation decision. The County disagrees and believes the Commission has an important role in mediating the situation. The County would like the Commission to stay the decision until the outcomes of mediation that help define what measures can be taken by the County to allay NPS concerns of impacts to the Park. Commission participation is critical for serious negotiations and settlements. Designation is divisive in this Community.

Deputy Keith Okamoto mentioned he was present for technical support.

Commissioner Starr asked if a private property owner drills a well for their project what is the role of HDWS in terms of siting the well.

Deputy Keith Okamoto responded if the developer plans to tie into and use the HDWS system it must work hydraulically and within the HDWS infrastructure from source to place of use. The high-level aquifer has been identified as possible locations for such sources by HDWS. It is up to the developer to find property in the area if they own none in the high-level area. HDWS collaborates with the developer and the result must be approved by the Water Board in an agreement.

Commissioner Starr asked about the private well that did not use the HDWS infrastructure.

Deputy Keith Okamoto responded that the developer would have to come just before the Commission.

Commissioner Starr asked how does HDWS determine impacts to HDWS, other existing private wells, and the protection of the aquifer from such wells.

Deputy Keith Okamoto responded if Commission staff requests comments on an application or if there are environmental assessments occurring then HDWS provides comments. But unless they tie into the HDWS system they typically don't have much comments to offer.

Commissioner Starr went on he was just wondering about the County's role in controlling the allocation of water and protecting the ground water resources in Keauhou.

Deputy Keith Okamoto responded their jurisdiction is only within their system, which currently pumps about 11.5 mgd. HDWS cannot speak for all the private wells.

Commissioner Starr understood then HDWS's management limited to only their system and wells to be part of their system.

Deputy Keith Okamoto said primarily.

Commissioner Pavao asked if it were true that if a well was to be used for domestic water, then it comes under the purview of the HDWS and HDWS is entitled to comment on the well.

Deputy Keith Okamoto said yes, if it is tied to a subdivision action.

Commissioner Pavao added so even with private wells not connected to the HDWS infrastructure HDWS has some jurisdiction on reviewing the well.

Deputy Keith Okamoto agreed.

Commissioner Buck asked about the scope and timing of the revised County Water Use and Development Plan and if it could help the Commission in its assessment of authorized planned use (APU).

Deputy Keith Okamoto thought it would provide insight into (APU). The scope of the update is actually for two aquifer systems (Keauhou & Waimea). Consultants Fukunaga & Associates are working on the updates now. Preliminary information was presented on the November 19 presentation. The consumption estimates are to be based on a more refined detail down to individual areas or homes, industrial, and commercial uses. They are looking at the Community Development Plan.

Commissioner Buck asked when the update would be available for comment.

Jon Nishimura (Fukunaga & Assoc.) there is a draft scope review going on right now for the project description. They are planning on getting something ready by January of next year [2015].

Commissioner Buck asked if it would be ready by the end of January for staff review.

Jon Nishimura (Fukunaga & Assoc.) affirmed the time, and they had already been working with staff.

Commissioner Buck asked if the update would talk about location of wells.

Deputy Keith Okamoto stated he thought it could be part of the scope.

Commissioner Buck asked about the timeline for drafts and review comments. He feels this is a vehicle to reach common agreement on what goes where.

Deputy Keith Okamoto suggested and asked Mr. Nishimura if a couple months would be enough.

Jon Nishimura (Fukunaga & Assoc.) said sure. The scope of work is to refine and clarify some misconceptions taken out of the original Hawaii Water Use and Development Plan effort. He has testimony to present later on that. The County already has their CIP Development Plan that addresses their system infrastructure.

Commissioner Beamer asked for an example of a proposed well that was denied by the County.

Deputy Keith Okamoto said a good example is Kaloko Makai, which was a large development. There has been no agreement between the Hawaii Board of Water Supply (HBWS) and the developer for water commitments, though the developer may have other permits or approvals from other agencies.

Commissioner Beamer asked if the source would be on county land.

Deputy Keith Okamoto said not at this point.

Commissioner Beamer asked about the process to get approval from the County water system.

Deputy Keith Okamoto replied that HBWS system cannot accommodate a proposed development of that size. The developer would have to come to the table with proposals on how to meet their water needs. It would probably be a new source. HBWS would discuss their system hydraulics parameters (1700 foot elevation, storage, transmission, redundancy, etc.). One well may not be enough. The developer would also have to go to the Commission for permits.

Benjamin Kudo added that developers do not want to own and operate the water system, but they have the means to develop new sources. So they will discuss the requirements of the County to eventually turn it over to the County.

Commissioner Beamer asked how does the HBWS define the public trust.

Deputy Keith Okamoto said they don't explicitly target public trust uses, but their service in providing domestic use is a public trust use. That is their primary mission. They do work with environmental assessments and the County Planning Department to address those concerns. If waste is an issue, they do have a robust unaccounted water program, not just leak detection, for over 20 years.

Commissioner Beamer thanked HDWS for showing the Commission the Kahaluu Shaft and asked about the management of the Kahaluu Shaft's high chloride content and the need to mix other basal water sources with water from the high-level aquifer to achieve better quality delivered water.

Deputy Keith Okamoto said that when the State turned the shaft over to the County in the late '70s the chloride levels were already high, as well as other basal sources, and it has been a challenge. They are lucky the high-level sources were found and over the past 20-30 years HBWS has been trying to reduce their

reliance on the basal sources and transfer that reliance to the high-level sources. The Kahaluu Shaft was supposed to be the solution for the K-to-K Plan where the water infrastructure was designed to be from the lower elevations to boost water uphill. That was the development plan at the time. With the chloride challenges and the discovery of the high-level sources Hawaii Department of Water Supply (HDWS) had to shift 180° to develop the high-level and bring water downhill. HDWS has invested over \$30 million to address the challenge. Recently they invested \$12 million in a transmission line close to Palani Road, specifically to bring high-level water down into the Kailua Town area, which would provide better quality water. HBWS has also partnered with private entities to provide another mauka-makai corridor called Waia South Corridor, with the same intent to bring high-level water down to the makai areas. So this is their plan to improve quality and reduce reliance on the basal sources.

Commissioner Antolini thanked HDWS for their presentation and asked about the percentage of current pumpage from county only, county linked, and purely private wells.

Deputy Keith Okamoto deferred to Commission staff but HDWS does know what they pump from their sources, which is about 11 to 11.5 million gallons per day (mgd). They understand that total pumpage is about 14-15 mgd. So the difference is sources other than the county.

Commissioner Antolini asked about the County's purview over the balance above HDWS's 11.5 mgd?

Deputy Keith Okamoto said they have direct purview for the 11.5 mgd. If the development needed subdivision approval then the HBWS was part of the initial review. But after that, HDWS management of day to day operations of those sources HDWS's involvement is minimal to none.

Commissioner Antolini asked, with respect the Hawaii Water Use and Development Plan (HWUDP), what is the consultation with stakeholders' process for that plan other than the Commission process; specifically, where how does the Park fit in these.

Deputy Keith Okamoto replied that the Commission staff can talk about the public hearings required under the Commission process, but the HWUDP is required to be adopted by the Hawaii County Council and those public proceedings allow public participation. So there are both the County and Commission proceedings that allow public participation in the adoption of the HWUDP.

Commissioner Antolini asked about the real traction of the NPS comments as NPS said they had commented many times before but feel they haven't truly haven't truly participated in the process.

Deputy Keith Okamoto replied they would be invited to participate.

Commissioner Antolini asked if HDWS needs more time to provide additional argument on the factual and legal issues and on the preliminary findings of fact.

Benjamin Kudo said no, only on what is required by this summer. But he was puzzled about the NPS legal issues in the designation forum. If they wanted the Commission to address legal issues then a declaratory order is the appropriate forum to address the circumstances before the Commission.

Commissioner Antolini asked if HDWS needs further opportunity to present legal argument issues.

Benjamin Kudo said HDWS would file a petition for declaratory order if they feel they need to do that.

Commissioner Antolini asked if there are any more potable wells planned in the basal portions of the aquifer area.

Deputy Keith Okamoto replied nothing has been presented to Hawaii Department of Water Supply (HDWS).

Commissioner Antolini said then it's all coming from the high-level areas.

Deputy Keith Okamoto replied if there are any more potable wells planned then they would come from the high-level portions of the aquifer area.

Potable needs should be met with the high-level sources.

Chair Aila added it sounds like the policy is to move to the high-level portions of the aquifer but what mechanism does the County have to ensure that happens.

Deputy Keith Okamoto replied if a developer wants to use the HDWS system to deliver their well water it needs to work hydraulically within HDWS's system. The high-level is where HDWS's long-term CIP plans are and HDWS anticipates chloride challenges to those seeking to develop basal sources. If a developer were to show they had a good quality basal artesian source then HDWS would look at that along with the Commission. There is collaboration and source development is not done in a vacuum by HDWS.

Chair Aila asked about a conservative policy like if there a distance between wells in the mauka corridor to avoid interference.

Deputy Keith Okamoto said that is done in collaboration with Commission staff, but a rule of thumb is maybe a quarter mile. Pump tests are performed and he believes that adjacent wells can be monitored to see any potential impacts during the pump test. That will help to determine the impacts.

Commissioner Starr brought up the Parks concern of new basal wells around the Park and if the County knew about all the potential basal non-potable sources around the Park.

Deputy Keith Okamoto apologized saying he did not.

Commissioner Starr asked how much of the basal water HDWS pumps has fairly high chlorides more than they would feel comfortable providing directly to customers.

Deputy Keith Okamoto said every source in triple digits. 150 (ppm) has been mentioned as a benchmark. They desire to minimize all the basal sources as they all have that challenge

Commissioner Starr asked how much pumpage comes from the basal aquifer.

Deputy Keith Okamoto said about half.

Commissioner Starr asked about the plan to replace the basal sources that pumpage of about 5.5 to 6 mgd.

Deputy Keith Okamoto replied HDWS has 6 high-level sources that have not maxed out. The challenge is the transmission infrastructure to move the water. Waiaha well could be utilized more. There is a new Keauhou well in partnership with Kamehemeha Schools that they are thinking about putting online in the future.

Commissioner Starr said he is hearing HDWS is not developing the high-level water themselves but rather having the private developers do that.

Deputy Keith Okamoto said he wouldn't say that but HDWS is working with Kamehameha Schools on their existing wells and HDWS is outfitting the electrical controls, tanks, transmission lines, etc. towards production. In their proposed CIP there is one more future well but have not determined its location.

Commissioner Starr asked what the mechanism is to get the private developers to get water for HDWS.

Deputy Keith Okamoto said the mechanism is a water developer agreement. As Mr. Kudo explained, most developers do not want to operate and maintain a standalone water system. They will drill a well of a certain capacity in the high-level then will enter into a discussion with HDWS on how to integrate into the HDWS system including how much water goes to the developer and how much to the HDWS to provide for their customer base. There is some form of agreement depending on the quantities developed for each. The agreement is executed through their Water Board.

Commissioner Starr opined that the HDWS is then dependent on private developers to try to make good the HDWS wells that have gone salty.

Deputy Keith Okamoto didn't think it was dependent but rather a collaborative effort to benefit both.

Commissioner Starr asked if he was a mauka landowner who wanted to put in a new well for 1 million gallons per day (mgd) demand how much well capacity would he need to provide to satisfy HDWS's needs.

Deputy Keith Okamoto probably 1,000 gallons per minute (gpm). [1.44 mgd]

Commissioner Starr said he's trying to understand what he learned that about pump capacity and the water one uses would be at 2/3 of 2/3 of that pump capacity because you de-rate it by 1/3 for demand factors like average day and peak demand factors and then derate it by another 1/3 for other system factors like on any given day a certain percentage of wells are out-of-service. So he's always understood that if he needed a 1 mgd he would have to provide in excess of 2 mgd capacity to ensure 1 mgd is available. So where does the Count's take come from.

Deputy Keith Okamoto said their most recent agreements do have that 1/3 and 2/3 but they don't compound that with another 1/3 or 2/3. So if one needed 1 mgd, typically 1,000-1,050 gpm, would be a rated capacity 24 hours pumping of 1.5 mgd. That would typically satisfy HDWS requirements.

Commissioner Starr said then from a 1.5 mgd capacity source 1 mgd would go to the developer and HDWS would use the excess, if there really was excess, because HDWS is banking there isn't system demand factors.

Deputy Keith Okamoto said correct.

Commissioner Starr said so HDWS is using phantom water.

Deputy Keith Okamoto said they don't use that term.

Commissioner Beamer had two more questions. First, that looking at the graphs of authorized planned use showing needs at 600% above sustainable yield what is the process to mitigate that or to say that isn't going to happen anytime soon so no need to worry about it.

Deputy Keith Okamoto said HDWS isn't saying not to worry about it, but the LUPAG is more of a conceptual vision of proposed locations of developments but not about how much and when. So that exercise back in the 2010 Hawaii Water Use and Development Plan (WUDP) was an attempt by engineers to quantify a qualitative concept. If every square inch of this theoretical world using some guesstimate of water needs in terms of some number of units over some area. This assessment was done island-wide using a common baseline to see where they would have to look at closer. Nobody is going to develop 100% of every square inch of property, that doesn't even happen in downtown Honolulu. It was never intended to project or say these are the future water needs, it was an exercise using this concept to determine which aquifer systems need a closer look and they found two. That was the intent. They do not disregard the results, but they do not expect all development to happen. Land use policies they have make it so they wouldn't come close to the full build out because of traffic and other infrastructure requirements.

Benjamin Kudo added that Chapter 205, Act 100, created the Land Use Commission process where they planned out the entire State in four (4) categories: agriculture, urban, conservation, rural. The LUPAG map is similar to that. It doesn't mean it will be used as specified, it means that for planning purposes that is where they think such land uses should occur. It is not tied to specific developer, projects, or landowner. Mr. Kudo has been through this process and just because a property has the right color on a LUPAG map doesn't mean you are going to get the zoning approved. It is merely a planning tool the County uses to look ahead into the

future. The 2010 WUDP wasn't meant to calculate water usage. If you put the two together you get an absurd result – 1 million people in the Keauhou region. So the purpose of the WUDP tool has to be put in the proper context. The committee reports to the Water Code indicate the Water Code was not intended to hinder the Counties in their planning and zoning capabilities, functions, and obligations. If you use the WUDP as a regulating mechanism then all the Counties would start putting areas in unplanned or open space because they don't want the Commission to dictate what can or can't happen in those lands. LUPAG is not designed to project future water usage.

Commissioner Beamer asked one more question about Honolulu where it is designated with plenty of development. HDWS must have talked with the Honolulu Board of Water Supply – what is the fear of designation?

Deputy Keith Okamoto said each county is different and HDWS's understanding is that Maui and Oahu have additional sources from [aquifer] connected systems that can have buffers with adjacent aquifers. One could bump up pumping to establish the 12-month moving average to create a buffer for the aquifer being designated. HDWS doesn't have that capability nor would they do that to create a bogus pumping number. If Keauhou is designated, existing use would be based on pumpage in the recent past that does not include water commitments. They have about 1 mgd of laterals in place where people could hook-up immediately and those wouldn't be factored into the existing water use permits. So their fear is they will only be limited to their actual existing pumpage.

Benjamin Kudo added from a regulatory standpoint there is a difference. Right now the County of Hawaii manages the Keauhou Aquifer. If designated, the County now becomes an applicant with all the increased analysis, cost, and significant risk of not getting an approval. Legal costs and contested case requests could go on for years. He cited the example of the Waiahole Case. So there are significant increased issues for the County as an applicant rather than a manager of the resource.

Commissioner Pavao commented for clarification. First, normally the 2/3 of pump capacity is intended to meet the maximum day requirement so you already have a cushion. Second, future water needs and their effects on sustainable yield the reality is the HDWS would never let pumpage go above sustainable yield.

Deputy Keith Okamoto added one more comment to Commissioner Beamers question on the public trust. HDWS does not give out commitments freely or frivolously and the only time meters are given out over the counter is for a regular single family residence. Anything beyond that HDWS requires the applicant to hire a professionally licensed engineer to explain their water needs. Plans are required and if water is available HDWS will agree [to provide water]. The Mayor and developers will agree that HDWS makes applicants and engineers work for the meter reviews their proposed water needs. HDWS would like to give out more water as it generates more revenues, but that is not how they operate.

Commissioner Starr said he understands the role of HBWS, if similar to Maui Department of Water Supply, is to supply source and transmission to make water available to anyone and not depending on a developer to do that. He's hearing that HDWS is not 6 million gallons per day in the hole but now 7 million gallons per day due to commitments. He doesn't hear there is any plan by HDWS to create new

source and transmission other than developers doing it and giving HBWS a crumb to keep limping along. He doesn't see that as fulfilling public trust of what it was created to do. Please convince him otherwise, is there a plan to meet the 7 million gallons per day shortfall.

Deputy Keith Okamoto disagrees that HDWS is 7 million gallons per day in the hole. The reason they are pumping basal sources is because they have high-level sources that are inoperable right now. They have spent over \$40 million in this one aquifer shift the sources from the basal to high-level areas. They also want to provide water to those who have an existing lot of record can get their first meter before another commercial or residential development comes along. They have excess capacity for smaller 5 lot subdivisions. HDWS does not have extra capacity to do 100 lot subdivisions. HDWS does not give preferential treatment to the first one with money to get water. So a large developer would not come in and take all the excess capacity. HDWS tries to split it up so that everyone gets an equal opportunity as possible.

Commissioner Antolini turned back to that Water Use and Development Plan (WUDP) and that statement that the Commission should not be relying on it for authorized planned use. How much is the WUDP an opportunity for the County to maintain management of the resource and what is the potential for the process to do that, especially with regard to cumulative impacts as raised by the Park.

Deputy Keith Okamoto said understanding the specific concerns as raised over the past several months it is an opportunity for HDWS to include them in the scope of work for the WUDP update. They intend to look into more detail like project by project, which wasn't done in the 2010 WUDP. They will work with Commission staff and County Planning Department to set up that scope to make the WUDP a useful product for the Commission and the County as required by the Water Code and other planning issues.

## **County Hawaii Planning Department (HPD)**

Mr. Duane Kanuha (Director, Hawaii Planning Department) summarized where the Hawaii Planning Department's (HPD) participation has been in the designation process. Basically, HPD has two major comments concerning HPD participation in this process: 1) HPD has tried to answer their perspective of authorized planned use, and 2) their evaluation of the petition and conclusion that the petition does not make a compelling case for designation. The fact finding and investigations since over time has reinforced their position. These were in place before the recent preliminary findings of fact (FOF). Their comments on the FOF relate to authorized planned use and to the negotiations with the Park. He wants to keep it short so the Commission can hear members of the community as the Commission has heard much of the County's comments already, we've been going 5 hours already and it's still just the County and the Park testifying. In regards to authorized planned use, since he's served on the Land Use Commission (LUC) and served as Chair to that Commission, it is clear what land use designations mean under HRS 205 and the four (4) categories. The conservation district is strictly managed by the State Department of Land and Natural Resources (DLNR); the agricultural district management is shared by the county and state; the rural & urban districts management are exclusively left to the county through HRS 46-4, which gives the county zoning power within those districts. HDP believes whenever items are going into the urban district they believe that is what the definition is talking about in terms of land use designation.

The LUC gives consideration to the General Plan (GP) and Community Development Plans (CDP) of the counties during land use boundary amendments. That does not mean the LUC has adopted the GP or any of the plans as a land use designations such as the Land Use Pattern Allocation Guide Map the CDP adopted by the Hawaii County Council. The Hawaii County Council adopts these plans so there is consistency in planning on the Big Island. With respect to negotiations with the Park to alternatives to designation, he read the agenda/discussion items as defined by the Park:

- 1) The reaffirmation of shared commitments, desire to work collaboratively regardless of the decision on designation, interest in long-term protection of public trust uses in the area, and the orderly and timely development of new municipal water sources:
- 2) Enforceable components of a future water resource management process, reduction of uncertainty for all parties, explicit consideration of effects of new water sources, due process for well developers and other parties;
- 3) Discussion of methods for agreements, for example memorandum of agreements;
- 4) The role of Kona Ground Water Round Table.

Director Kanuha continued to state that there is nothing in these items that are deal breakers. We can come to some agreement. The County has a good meeting with the NPS Park superintendent, but they were reluctant to extend the consideration period of the petition to allow these negotiations. The County is open to a management program in this particular aquifer. Some type of agreement with all the stakeholders in terms of triggers or safe guards prior to reaching sustainable yields and some form of refereeing by the Commission. They would like the Hawaii County Council to be involved with this to include the legislative endorsement rather than simply an administrative agreement. The administration has been clear about working together.

Commissioner Antolini agreed and asked if the County would put much of what has been said today in writing.

Director Kanuha replied they did not respond the NPS agenda because they were unwilling to extend the time for review the petition. So they never got to the point of discussing the County's ideas.

#### **State Department of Accounting and General Services (DAGS)**

Mr. Ralph Morita - Planning Brach Chief (DAGS) testified on behalf of the Judiciary Kona Complex Project. Believed basis for the **petition is unfounded** and designation will delay start of the project and adversely impact the funding for the project. Referred to two written letters from DAGS in opposition to designation on Oct 27 and Nov 24 in 2014 and stand by those written testimonies.

#### State Department of Hawaiian Home Lands (DHHL)

Ms. Jobie Masagatani (Chair – DHHL) and Kaleo Manuel (Planning – DHHL) **offered comments** for the Commission's consideration. DHHL holds over 1500 acres in the aquifer, is very interested in the Commission's decisions in this aquifer, and DHHL's mission is integrally linked with their ability to secure

water resources. DHHL has clear legal rights to water under Act 221 (Hawaiian Commission Act) and the State Water Code and realizes there are other public trust resources, including DHHL reservations, to consider. DHHL wants to be sure the Commission knows what DHHL's needs are in the aquifer and on November 17, 2014 the HHL Commission authorized DHHL to formally request a reservation of 3.398 million gallons per day (mgd) in the Keauhou ASA for current and foreseeable DHHL development. DHHL takes no position on designation but offers the following comments: 1) In regards to DHHL reservations, DHHL needs the confidence that such reservation is protected since DHHL cannot move as fast as private developers yet must meet their public trust obligations; 2) implementing the Hawaiian Homes Commission Act is part of the compact accepted by the State as a condition of admission into the Union, thus the State. County, and DHHL has the obligation to fulfill the purposes of the Hawaiian Homes Commission Act in these North Kona lands by ensuring there is adequate water for DHHL. Therefore, the designation decision should explicitly protect adequate reserves of water for DHHL in the Keauhou aquifer; 3) the Commission should ensure that reservations will be protected in a non-designated water management area to the same standard as in a designated water management area. DHHL does not know what the process is to take into consideration DHHL needs in a non-designated area; 4) Finally, the Commission along with the County should develop a mechanism to protect DHHL's reservations either by ensuring DHHL's rights are considered before new wells or pumps permits are issued or through some other mechanism that can be enforced.

Commissioner Starr commented it's good to see DHHL to quantify for the region.

Commissioner Beamer thanked DHHL for its testimony and asked about their water needs in the area.

Chair Masagatani said they have sufficient water credits to develop La'i'opua 117 lots. DHHL doesn't have enough for the second half, or full build-out, of La'i'opua Kealakehe lands.

Commissioner Beamer asked if DHHL's understanding of the County process considers DHHL as a public trust.

Chair Masagatani said DHHL understands what the Department of Water Supply treats DHHL the same as others as described earlier as the fair allocation of water users as they come. DHHL has a different perspective in terms of DHHL need for water on an operational basis in each county has been challenging. There are reservations, but then there is getting what DHHL staff has called actual wet-water. Part of that is the cost associated with building the source, transmission, etc. necessary to get actual water.

Commissioner Antolini appreciated the analysis DHHL submitted and asked about the gap in the mechanism in non-designated areas to create reservations, which has never a happened, and noted the rule making process to do so in designated water management areas. What would DHHL suggest be the mechanism to protect their needs outside of a designated area.

Chair Masagatani said she did not intend to be coy but water is not under DHHL's jurisdiction, so the Commission for **DHHL did not specifically take up the question of support or opposition to designation. DHHL's concern was reservation**. DHHL had asked Commission staff to brief the DHHL Commission on the process in a non-designated area and it was not clear. DHHL is asking the Water Commission to assure

DHHL protection of their reservations as a public trust that it be done to the same standard in a non-designated are as a designated area. DHHL does not know if a reservation can be done in a non-designated area. For DHHL to meet its fiduciary responsibility they need to ask the Commission for a reservation now.

#### **Public Testimony**

Ms. Karen Nardi testified on behalf of the National Parks Conservation Association (NPCA). Supported petition and asked Commission to designate to put the area into a system of administrative control. NPCA is a private organization with over 1 million members. NPCA's mission is to support and protect the National Parks. Kaloko-Honokohau is exceptional and has some of the most important cultural resources but it also has coral reefs, wetlands and endangered species. Anchialine ponds are rare freshwater sources under tidal influence. Hawaii has 50% of all the anchialine ponds on earth. NPCA believes Keauhou should be designated under a permit system and not informal means as discussed today. First, State law gives the Commission jurisdiction over water and the Hawaii Supreme Court further describes this in the Koolau Ag case. There are two systems of management. In an area we water may be threatened, repeat may be threatened, it must be designated to move it into a system of administrative control. The other area is managed by common law, called water rights. While there are some protections of water in non-designated areas, such as the land use process, designation is the only way to proceed in an organized permit system that establishes a framework where the interests of all the people can be involved. Public and private project development moves at different speeds and it must be balanced and public projects should not be at the back of the line. Designation is the only way to establish a reservation for Department of Hawaiian Home Lands (DHHL). The protection of the ecosystem users is part of the public trust doctrine. NPCA is not antidevelopment. The goal is to set up an equitable system where all stakeholders can be heard. This has happened in other areas of Hawaii, all of Oahu with the exception of one area, Molokai, and recently Maui got a designation. It is a misconception that an aquifer has to be at 90% of sustainable yield to be designated. In only one of the aquifers in the state is it over 90% of sustainable yield, on Maui. On Molokai it is less than 5% sustainable yield when it was designated. She thought it was instructive from a statement by Jeff Eng (former Directory of Maui Department of Water Supply (MDWS)), where in hindsight the MDWS should done conservation earlier and didn't know why they didn't. It is an important message for the Keauhou community and Commission to consider. Ms. Nardi went on to describe why mediation is not a good option. It is not the law and the Commission has the sole jurisdiction when there is a threat, not imminent harm but threat, then an administrative permit system is required. Everybody then gets an opportunity to provide evidence and have their point of view heard (she used the analogy of building a home via mediation with the town and planning department rather than simply getting a building permit, which is more comprehensive). The Hawaii Department of Water supply (HDWS) has an important role, but they are not everyone in this process. There is maybe 5 mgd of private water system that needs to be brought to the table for mediation. Also, six years of collaboration and round tables that have not produced alternatives to designation. So finally the legal standard is that the NPS has produced more than an adequate amount of evidence that there is a possible threat. Pumping in the uplands impacts the coast. The basal sources have excessive levels of chlorides. There is dispute about future authorized use and like Dr. Scheuer said there are many ways to look at future use. But the fact is that there is an interconnection between the aquifers as shown by the USGS studies and the pumping puts the resources of the Park at risk. So the NPCA view is that the Commission should not wait until a crisis develops. The precautionary principal requires in the face of uncertainty not to

postpone environmental protection of the resource or an fair and equitable system of sharing and conserving the resources through this permit process. Therefore, in conclusion, NPCA urges the Commission to move forward towards the 90-day period which the law provides.

Mr. Reggie Lee (on behalf of the Lee, Kamaka, Kahananui, & Ako Ohanas (lineal descendants to the area) testified that the ohanas are not in favor of the petition. When this all started they were not consulted. They've lived here all their lives, submitted their viewpoints on the situation. He believes in the Department of Hawaiian Home Lands (DHHL) and claims they make to water rights but asked that the lineal descendants be respected. Whatever the Commission decides, it will impact their way of living in Keauhou. The ohanas oppose the petition.

Ms. Ann Bouslog (Development Manager for Forest City - Kamakana Villages) testified that the Commission had visited their monitoring well, the Kamakana Well, during the field investigations in the fall. As developer of this property, they are concerned their project will be stopped or seriously delayed by designation. Kamakana Villages is a State project sponsored by the Hawaii Housing Finance and Development Corporation (HHFDC). Kamakana Villages is the State's major housing initiative on the island and is currently the largest private/public venture in the State of Hawaii. Kamakana means the gift. She went on to describe the project and the process on consulting with the County. The County is in the driver's seat and have been a fair partner doing an excellent job looking out for the resource in Kona. HHFDC selected Forest City to be the developer of Kamakana in 2009 and they have worked extensively with the County, the State, neighboring landowners, the U.S Fish and Wildlife Service, and other federal agencies with numerous community groups. Other stakeholders include the lineal descendants of the area and other interested individual involved with planning in the community. The 270 acre project is to offer up to 2300 residential units, of which more than 50% would be affordable. There is a dearth of affordable housing on the west side where there are jobs and residents are subjected to horrendous commutes and traffic. The project is looking at water and energy conservation and it will serve as a model that it can be done. \$20 million dollars of mostly State funds has been invested in the project. Entitlements have been made including a high-level well for HDWS for the project. Forest City is concerned that designation would at best slow down and at worst stop their project. The process for approving water with the County is very extensive and the County is in the driver's seat. They are doing a second EA for a well for 1.5 million gallons per day (mgd), a third of which is going to the County. They are looking to improve other water infrastructure in the area. They are looking into activating a State monitor well developed in 2005. There is an underutilized County reservoir in the area. There is a water agreement and they are looking to establish a second water agreement due to changes in water line layout. They are happy to work with and do what is right for the County.

Chair Aila then recessed the meeting for a short break. Chair Aila then resumed the meeting.

LeeAnn Crabbe (Queen Liliuokalani Trust) testified and advised that the Trust requested a contested case and read her written testimony for the record. The trust is opposed to the petition to designate the Keauhou Aquifer. The Trust has conducted studies over decades on ground water issues and relies on credible sources of information and data for their decision making – they are Hawaiian, they are akamai.

There has been a lot of discussion of public trust resources today. What about alii trust resources that need to exist in perpetuity for the benefit of their kamalii and lahui? The Trust receives no special protection. In a meeting with Mayor Kanoe, he was astounded that the Trust, Kamehameha, Lunalilo, Queen Emma receive no protections from these laws at any level of government. These alli trust resources compete on a level playing field with everybody else and they are fine with that because they are able to do so. There are no reservations for alii trusts, which is a special carve out for the Hawaiian Home Lands. Unlike Ann (Bouslog), who they love dearly, the Trust does not particularly enjoy working with the Hawaii Department of Water Supply (HDWS). They drive a hard bargain. They protect these water resources. She has sat across the table from Commissioner Pavao for hours crafting a water agreement and can speak from personal experience in drilling source and working on transmission lines to bring that high-level resource down to makai lands. HDWS drives a very hard deal and the Trust does not want to deal with anybody else. It is hard enough as it is. The Commission seems like wonderful reasonable people but it is another layer of government intrusion on what the Trust needs to do to serve their lahui. Not to give props to HDWS unduly, but they have initiated transmission projects on their own, the Palani Transmission Project is one example that the Trust was lucky enough to participate with them. It is a good example of public private partnership bringing sorely needed freshwater down the hill to the makai communities.

Commissioner Beamer thanked Ms. Crabbe and wanted clarification that specifically QLT is worried that designation will harm QLT lands to...

Ms. Crabbe answered, yes, QLT's ability to realize the potential of these lands at Keahuolu and apologized for interrupting.

Commissioner Beamer asked QLT won't realize the potential of the lands because...

Ms. Crabbe answered because of the additional layer of regulatory burden that would be put on QLT to develop sources of water to make the lands productive.

George Robertson (field representative for Office of U.S. Senator Schatz) testified they had been watching this issue for quite some time and mostly with developers and not so much with the Park, but they have listened to all the testimony so far from all the meetings. Mentioned Senator Shatz's letter to the Park and County requesting they consider mediation. The Senator wants to see the parties avoid litigation and see's it going down that road. The Senator wants to see it settled in a pono way as opposed to the Kawaihae way of beefing about water. That's what Hawaiians did and where the name of Kawaihae came from and Mr. Robertson is familiar with this as he is from there. The Senator and Mayor do not want to see the fighting either. If the Commission would encourage mediation there could be a more peaceful outcome.

Commissioner Antolini understands the letter came indirectly to the Commission and since then what has been happening and what is the Senator's perspective on having the discussion happening.

Mr. Robertson answered that there was no reply to the letter, which was a little disturbing. As far as they know, no action has been taken. NPS has told them there are conversations in D.C. about the matter but he doesn't know the outcome of that.

Commissioner Buck asked about resources or assistance the Senator would provide.

Mr. Robertson answered that the Senator set up a mediation forum with the U.S Fish & Wildlife Service involving critical habitat in the Kona area and that was with a number of the same people that are in the room today, especially developers who were concerned about critical habitat designation. That process was difficult for everybody, but mostly all the parties were able to come to a settlement of designating areas to be protected. So that was a successful process. Peter Adler was the mediator. So it has promise if the parties are willing to explore that route. No harm in doing and the Senator would appreciate it.

Commissioner Antolini asked the Senator was aware of the U.S. Institute for Environmental Conflict Resolution in Arizona, an agency set up by Congress to assist agencies for alternative dispute resolution and it is very good.

Mr. Robertson answered that was a great and good suggestion and asked for the institute's name again.

Commissioner Antolini read from the website called the Udall Foundation U.S. Institute for Environmental Conflict Resolution about the assistance this institute provides to help federal agencies. It is a pretty amazing group of people set up by Congress.

Ken Melrose testified that for a period of time the Kona Community Development Plan (Kona CDP) was created through a community engagement process under his chairmanship. For the first several years of its implementation the Kona CDP had unanimous approval throughout the process. It refined the goals of the County General Plan and regional basis. The overall land use in the Kona CDP focused on creative solutions to protect the environment while accommodating growth. That growth is directed to within the urban designated areas in the General Plan, which extends from Keauhou to Keahole. The reason it has been implemented in that way is because Kona was in a crisis of gridlock where there was no affordable housing in the urban area and housing development was occurring farther south where it does not have the roadway capacity now or in the foreseeable future to accommodate. So the decision was to focus its growth in an area it could accommodate jobs near homes and where infrastructure could be developed. At the same time the environmental polices focused on protection on watersheds and coastal water quality. This already instilled precautionary principles in decision making as Kona moves forward. The Park's petition seeks to undo most of that good work. If designated, the Hawaii Department of Water Supply (HDWS) has said they will suspend issuing water meters in the area from Tashima's Restaurant to the airport. That is the whole area where growth is proposed to occur. Growth will still occur and be pushed farther south where Kona does not have the infrastructure. The community made a willful decision to focus its growth to its urban core. He did not think the scientific case has been made to go to the level of designation to make use of the area's sustainable yield. There is no effect of ground water withdrawal on anchialine ponds including the Park's ponds. The problems at the Park's ponds is because they have not gotten around to removing their invasive species, like others have done towards restoration

- Kohanaiki, Kukio, Waikoloa, and up north of Mauna Lani. The creative solution is not designation but rather a package of a comprehensive management plan where information is shared freely and where withdrawal from the basal lens is minimized. We all recognize that. The Hawaii Department of Water Supply (HDWS) didn't initiate the Keauhou Aquifer designation, they received it. It is a primary source of water developed only 2 decades after water was even available in West Hawaii. There was no water. everything was catchment here before. So the Hawaii Department of Water Supply (HDWS) has been working towards a strategy that brings them to the high-level aquifer sources. This challenge, as Commissioner Starr has asked multiple times about getting that water down from the high-level aquifer. That is a function of resources and that function does not come from adding another layer of decision making on top of it and force the Hawaii Department of Water Supply HDWS to apply their resources to that additional process. He thought protection control of the ground water is under the biggest threat from dry wells. The water budget could be enhanced through improved level of treatment to R-1 and maximizing the use of wastewater reuse for irrigation. He respectfully asked that the Commission does not approve this designation but instead setup a responsible monitoring program, or management plan as Duane Kanuha referred to it, to help facilitate funding resources, as the National Park could, with sister agencies that have those funds for wastewater reuse. The Park could be helping rather than standing in the way.

Commissioner Buck thanked Mr. Melrose for his testimony and asked if the Kona Community Development Plan (Kona CDP) addressed the location of wells. One of the mitigating factors is spacing out the wells in the high-level aquifer and not right around the Park area. Is that discussed in the Kona CDP?

Mr. Melrose replied that the spacing of wells no, but the protection of the water supply and watershed – yes, absolutely. It sets up protocols for watershed management. Commissioner Buck may have been involved in some of those discussions at Forestry. The plan included a designation of a water protection area that provided protections for the high-level aquifer. Wells are drilled where people can get water. Some of the landowners like Liliuokalani, Lanihau, and Palani Ranch have lands that go far enough mauka and they can work out the spatial relationship. Where agencies don't have that land, HHFDC for instance, they have to collaborate with someone else who has mauka land. Hawaiian Home Lands is the same. They don't have mauka lands and need to collaborate with people who do. He used to manage the Waikoloa Water Company and wells drilled anywhere completely regulated where they went, how big of pumps go in them, and when they were reported. Private water systems do the same things as the Department of Water Supply. Kohala Ranch does the same thing, Waikii does the same thing. They all play in the same regulatory regime. There isn't a need for another layer of regulation at this point. With 38% of withdrawal from the sustainable yield designation is premature.

Mana Purdy testified in opposition to the petition and read his written testimony for the record.

Commissioner Pavao thanked Mr. Purdy for testifying.

William Carmen (Ph.D. Wildlife Biologist/Coastal Ecologist) testified in support of designation. He deals with the Park, it is a beautiful place, and the reason it was created was because the Native Hawaiians

chose the location because of the resources there. Ground water and freshwater and brackish water that occur there are because of the watershed and the water that flows down from the upper reaches of the watershed. The USGS (U.S. Geological Survey) studies show there was a link between the upper watershed and the lower freshwater lens down near the coast. He pointed out the sustainable yield is a mathematical model based on basically how much you can take out of the watershed before you start impacting its ability to refresh itself. It's not really an ecological designation. The U.S. Geological Survey (USGS) shows that you start taking water out of the upper watershed it is going to reduce the amount of water that flows downstream. It's not just how much can be taken out but what that water does. All that water creates a hydrological head that goes downstream underground and produces the freshwater lens that supports the freshwater and brackish marshes down in the coastal areas. As you take more water out the freshwater input reduces and at some point, maybe not yet, you're going to impact the freshwater and brackish surface water that is down in that area, which will adversely affect the Park. Not only upper areas but people removing brackish water from the lower areas as well as a desalt plant just north of the Park pumping out brackish water for their resort and then pumping highly saline water back in. Anytime you pump water out it is going to contribute to saltwater intrusion and the Hawaii Department of Water Supply (HDWS) is already concerned about saltwater intrusion from their coastal sources. With sea-level rise it's going to be a greater problem in the future. The Commission's job is that it is the only one that can look at this from a true watershed perspective and bring everyone together and to allocate those rights to not only public and private uses but the natural resources to be protected over a long period of time.

Joy Dillon (on behalf of Susan Lee Loy, 2014 President of Hawaii Island Realtors (HIR) & 600 realtors on Hawaii Island) testified HIR collectively opposes the Park's petition to designate. In brief, HIR opposes the petition based on the following reasons: 1) the petition is based on a hydraulic model from 1999 and does not consider more recent models that have not been cited in the NPS petition. 2) Aquifer withdrawal is at a small percentage of the sustainable yield. 3) County projections indicate that pumpage rates will only reach 28 million gallons per day by the year 2025, which is well below 90% of the sustainable yield. For these reasons, HIR believes the NPS petition is premature and lacks the necessary evidence to continue the process of designation. HIR respectfully asks the panel consider not moving forward with this process. If this petition is considered HIR is prepared to provide further testimony as to the many negative impacts that designation will have on the community; specifically, with regard to the Kona Community Development Plan (Kona CDP). Realtors respect and encourage quality planning process as evidenced by HIR's participation at all levels of government.

Rick Vidgen (realtor) testified in opposition to the current petition and read his written testimony for the record.

Jim Greenwell (Chair of Board - Lanihau Properties LLC) testified that designation is premature and at a minimum follow staff's recommendation to extend the investigation period for at least another year. He read his written testimony for the record. He also added that he had one quick analogy, and he knows it's presumptuous of him to know what it's like to be pregnant, but with this well project that they are in the middle of he feels somewhat that way. Before well was conceived in this way they thought they did everything they thought they needed to do before we went down that road in terms of working out a detailed water development agreement with Mr. Pavao and his staff. And it was tough. He wanted to ensure that in it

there was a lot of public benefit. I think they were willing to work with Lanihau because they had a good location that was properly spaced and fit their design perfectly and there was a good source beneath it. But we also realized we were one of those who wouldn't use that water for a long time. In fact, upon dedication Lanihau will have water credits but they don't anticipate asking for one meter immediately. Over the longterm as the development grows as determined by the community onto some of Lanihau land you would have some of that water to support it. But you go through that process and you spend \$8M dollars, now Lanihau is 8 ½ months pregnant and we can dedicate it early next year and now he feels without making fun of the process that it's like the delivery room doors are going to be closed or when the baby does arrive they will not be able to enjoy it fully. If we can put ourselves in one another's position – he doesn't really know what happens really in that circumstance but materially the concerns he has that deal with designation deals with certainty of the use right becomes less certain. That becomes difficult in Lanihau's position because we are relying on a degree a certainty for sure. The State level of permitting creates for Lanihau a potential problematic situation. The Park has a clear activity and interest in intervening and involving itself in almost every permit that involved any sort of the development of Lanihau's neighborhood. He doesn't want to see this become a contentious situation between us and a contractor and the County but try to work with the State. There are some of these things that were already in progress and were conceived and being pursued in good faith for reasons that benefitted Lanihau long-term and near-term for the community and the water supply department. He urged the Commission not to push this process further.

Nancy Carr-Smith (Aloha Kohala Realty) testified against the Park's petition and read her written testimony for the record. She added is appalled at the tenacity of the Park to think that they have the right to have such a negative impact on the people on Hawaii Island.

Jacqueline Awa (Lanihau Properties) testified in opposition to the petition. That is where she currently stands but foresees the decision may come up again in the future and she might change her mind, primarily because she has read as much as she could on this issue and needs to go back to her dad, who was born and raised in Kealakekua Bay. She has tried to interpret everything that is going on and she can't. If you are sitting here on behalf of the petition, you can throw out scientific data that is in favor. If you are here opposing it, you can throw out scientific data that is against it. She hasn't seen anything that leads her to go either way, but that doesn't mean that maybe this isn't the right time to make that decision. If the Commission decides either way what is really being asked who in essence is going to be the custodian of our Hawaiian water and resource. Looks like there are two opposing government agencies; the Hawaii Department of Water (HDWS) and the Park (NPS). She doesn't know who can do it better. She has seen what the Hawaii Department of Water (HDWS) has done and commends them, but maybe the times are changing and their mandates and practices need to change. That may mean we include another government agency. So, she's only bringing up questions because she doesn't have answers but she doesn't think anybody in the room has those at this time. That is why she is in opposition of making a decision that doesn't give us all the information we need for this important decision. My family is from Kealakekua Bay and we are a neighbor, so this sets precedence for what can impact the remainder of the island. If the Commission makes a decision now for this particular parcel how will that impact us? Is it maybe a better decision to wait and assess everything or look at the entire island as a whole? When you take one resource away from one area doesn't that mean that all the focus shifts to another place? It's like there's no water here but they will go someplace else. She really doesn't want to see development in the Kealakekua area. She thinks Keauhou

is set up for development but not agriculture. Just look at the landscape, it's totally different. Again, she is against designation and will submit her few comments and can entertain any questions. But she cannot answer any scientific questions.

Amy Bircher (Lanihau Properties) testified as a Kona resident in opposition to the petition. She read her written testimony for the record.

Karen Ostlig (President of West Hawaii Association Realtor) testified on behalf of 550 members and mentioned her written testimony she submitted. The tone of what she wants to say echoes that of what the Mayor said today, and that everyone in the room is a steward of this land. It is important that we keep this community a viable living entity. As Ken Melrose pointed out, there was a lot of work done on Kona Community Development Plan (Kona CDP) and that has defined some really important projects. They need to see their community grow where we have the types of things we need. Our citizens need good hospitals; our children are entitled to good education and schools. Low income housing is huge; everyone speaks of wanting to do that. From every indication she has and studied, they as a real estate community have put together panels and invited people to come and speak from all angles of this to give them as much information as they could gather. She stands in opposition to the designation and would love to see all of us being able to continue with these projects to get the schools, the hospitals, the low-income housing and to make this a viable livable community for all.

Carl Carlson thanked the Commission for coming to Kona hear the petition and the community. He testified in opposition to the petition. It started out with rather lengthy presentation which he checked this morning. He has been here a long time, he lives in Kaloko. Maybe old time Kona residents will recall that in the old days of 1969 they got their water from roof catchment and it was years before they were served by the County. Back then water conservation was not just an ethic they had, it was a necessity. I thought the Park's petition may be well intended but as you've heard in my view and that of many others that this petition is premature and for that reason he is speaking in opposition. He listened carefully to Mayor Kanoe and other county representatives and thinks they have spoken for the community. As a long time community member he feels that designation will be detrimental and would be catastrophic to the community. It could amount to a moratorium. That in itself would be very difficult for this community. It would be divisive to the community, which is not something anybody as community members wants to see. Like the Mayor said when you cross the street you want to shake people's hand and look them in the eye and agree to agree or agree to disagree. As was spoken by someone else most of the employment along the coast is here in North Kona and South Kohala. But with rising houses prices and cost of living here what happens is that working families move to South Kona or other districts. They commute infrastructure is not really designed for that type of community. It will be difficult if we have a designation and the County is unable to provide water as is necessary for the community and he thought the working families' plight will be further exacerbated. Those of you who know me are probably aware of the fact that he spent over 25 years serving on various state and county boards and commissions. Commissioner Starr whose wife is on the board of reagents and Mr. Carlson has spent 11 years on the board of regents, you heard a little earlier about Geri Bell's name mentioned from the Park. Geri Bell was his classmate at Baldwin High School, so we are all connected. As a community member his wife is the first graduate of the first community college program here in West Hawaii. She commuted to Hilo to get her baccalaureate from the University of Hawaii at Hilo. He has had

an interest in the statewide university system but he's parochial enough to have an interest in Palamanui here in Kona. He is concerned that if the County does not provide enough water for the campus to open in the fall of next year we are not going to be able to serve our higher education needs of their community. He is concerned about the delay, it's already been delayed too many years.

Don Thomas (University of Hawaii) testified he has spent the last 40 years doing research on ground water on the Island of Hawaii. His interest in this is to encourage the Commission to use the best science to guide you in your decision on whether designation is appropriate or not. He has looked at the staff presentation and they have done an outstanding job of compiling a tremendous amount of information on what is a brief read of the area and have taken the conservative and precautionary analysis of the data. In looking at and tracked the presentations and the petition he believes that the model that the Park has relied on to drive this request for designation is an obsolete model. He has tested that model with analysis of isotopic data and conducted analyses of water sample further testing the model and in quick summary have found is that the model being used cannot adequately describe the observations we currently have. The model has been used to project the impacts of withdrawals over the long-term. It is generally accepted that if a model cannot adequately describe what has been happening currently then its utility in projecting future impacts is substantially impaired. He thought considerably more work can be done to better define the aquifer and would absolutely endorse the suggestion that further work be done and hope we can bring more clarity to this aquifer system. It is a very interesting system to him. It is very different from what we've assumed it to be. He thinks that work can provide guidance to this Commission or future members of the Water Commission to come to a decision that will be in the benefit and best interests of all concerned.

Commissioner Pavao asked to further clarify the statement that the Park has relied on a model that is obviously not 100% accurate.

Dr. Thomas replied that the basis for the model that has been used assumes that the only type of structure in the Keauhou Aquifer that could impound water was a dike impounded system. Ground water from that dike impounded system would leak water into the basal makai system. The data they have now shows that there are other avenues for that water to move and the most recent data shows that the high-level aquifer would be receiving rainfall recharge from the area that is of concern. It appears that use of that high-level aquifer may have no impact whatsoever on the makai basal aquifer.

Commissioner Pavao asked about the deep aquifer and the possibility leakage exists far offshore and what is the percentage.

Dr. Thomas replied that he believes there is a high likelihood of that happening given what we've seen in the Kamakana Well and the Keopu Well. It has been observed that high-level water is moving through that aquifer that is below the seawater system that underlies the makai basal aquifer. It is clear that there is another avenue that the water can leave the island and it's very similar to the system that we've discovered in Hilo.

Commissioner Pavao asked based on that would any withdrawals in the high-level aquifer have no affect whatsoever on the ponds?

Dr. Thomas answered that just with that feature alone he would suspect it would have minimal impact but with this newest data that seems to separate the local recharge from the high-level aquifers he would suggest there would be no impact whatsoever.

Commissioner Antolini said she was going to defer to her senior colleague but had a question about Dr. Thomas's testimony and analyses, which she very much appreciated, in that what did Dr. Thomas believe is the key additional data the is necessary or can be gathered or the key questions that can be answered to help with the issue within the next 1 to 1½ year period?

Dr. Thomas answered that a lot of the questions can be answered and have been demonstrated that water in the high-level aquifer is both isotopically distinct and also has a much greater age than the immediately local recharge. So additional data on the mixed water in the basal aquifer would be very worthwhile to try to get better age dates on that mixed water to see how much high-level water is sequestered in the tidal aquifer. The other thing he would like to see, though it is expensive, is to try to find the confining formation to deal with the uncertainty of what exactly that is. Is it dike impounded or is it a matrix of dense flows that are impeding flow from the mauka area into the makai basal ground water system. That data would be very useful in better defining what exactly is going on.

Commissioner Starr was curious if Dr. Thomas knows the percentage of the basal aquifer that has similar age signatures as the high-level water.

Dr. Thomas answered the data he is familiar with is not so much from the Engott study. There was a thesis done at the University of Hawaii Jacqueline Kelly and she looked at the age dates of the makai ground water and of the high-level water from the upper elevation wells. That data indicated the makai water was actually fairly young. The high-level water was older but uncertain. In that study she used chlorofluorocarbons, basically a relatively recent method to try to get an age date on that water. In the work the he did, he was using carbon-14 and C-14 showed a much greater age. C-14 does not account for very young water and apparently there is some local recharge into the high-level water. The makai ground water is a little bit more problematic because there is a possibility that the ages there using the chlorofluorocarbons are incorrect because of possible mixing with the air. That's why he is saying if we can do a better job at characterizing the age of these waters we will have a much better handle on what, if any, of the high-level water is getting into the makai basal ground water.

Commissioner Starr thanked Dr. Thomas and looked forward to hearing more about this interesting subject.

Commissioner Buck asked the Chair given the amount of testimony and the need to finish by 6pm if we should be limiting our questions of the testifiers.

Chairman Aila said let's move along.

Jon Nishimura (Fukunaga & Associates) read his written testimony to clarify several statements that have been attributed to their firm.

Commissioner Buck thanked Mr. Nishimura for his testimony and asked if the allocation to the Department of Hawaiian Home Lands (DHHL) included in the projections?

Mr. Nishimura replied there has been some discussion about Department of Hawaiian Home Lands (DHHL) and other state public projects as the have been involved with some of that effort also. But the structure of this is that the Hawaii Water Plan (HWP) has multiple components. The State Water Projects Plan (SWPP), under the Department of Land and Natural Resources (DLNR) engineering group, they have been updating that data and now they are updating it as it has been 10 years without updates. They have also worked with the Department of Hawaiian Home Lands (DHHL). That number that was mentioned by Roy (Hardy), 3.4 mgd, was not included in the authorized planned use that the County had but has been included in the State Water Projects Plan (SWPP). There was another number that Roy (Hardy) put up, 5 mgd, from the 2003 State Water Projects Plan (SWPP) update. At that time, it did include Department of Hawaiian Home Lands (DHHL) numbers but they, again, revised their numbers. Planning is truly dynamic and ongoing so the current number may be double counted as the 5 mgd may have already included Department of Hawaiian Home Lands (DHHL) demands in there.

Commissioner Starr asked if they were using the IRP (Integrated Resource Planning) process or some other process.

Mr. Nishimura replied that the particular process and approach has been to first of all look at the sustainability of the overall land use policy. They were purposely conservative, and people may say too much so, but they identified areas using high density rates potentially allowable. There is a range of development that's allowed within a given type of LUPAG (Land Use Pattern Allocation Guide) in the General Plan. They used the highest level of density allowable. When you multiply that by the big number for planning and design for engineering of a system that is important. A lot of times the two numbers are getting mixed up in terms of establishing what is projected water consumption.

Commissioner Starr said he is trying to understand what process they are going to use with feedback from others, interaction, and for a feel of how long it is going to take.

Mr. Nishimura said for this update their task was to do a reality check on the original projections and define them with more detailed information and then go from there. Keith (Okamoto) had mentioned they probably need to take into consideration concerns that have come up with this effort and see what type of additional information would be useful.

Commissioner Starr ask if they are doing this specifically in response to the petition or is it a county-wide effort.

Mr. Nishimura replied yes that's why they are also looking at Waimea as part of the 2010 effort.

Commissioner Starr again asked if this was a county-wide update.

Mr. Nishimura clarified it is an update to the high priority areas on the 2010 effort.

Commissioner Starr asked if there was a feedback or public input process.

Mr. Nishimura replied yes.

Commissioner Starr asked how long would it take.

Mr. Nishimura replied the target date to come up with the projection update in summer of next year.

Commissioner Starr asked if that was when it would be brought out to the public.

Mr. Nishimura replied they bring it out to the public after several reviews including Commission staff and with the Planning Department (Hawaii) and the Hawaii Department of Water Supply (HDWS). And it will come back first thing to the Commission and is in their project description.

Commissioner Beamer asked looking at existing zoning the use, from what Jonathan Scheuer said, would be 103% of sustainable yield. Would you disagree with that? You mentioned were exaggerating the numbers?

Mr. Nishimura replied that what they did in the first effort was to look at the land use policies, which included zoning and mentioned state land use classifications. If they were to use state land use classifications and applied full build-out on those then we maximize potential development. They would have used maximum density allowable and the numbers would be super high because there is not enough definition at that time. Similarly, if we looked at zoning, other things come into play such as parcel boundaries that limit the amount of area that can be developed. So what it's coming down to the methodology they are using for authorized planned use was to come up with a unit count for a proposed parcel. Often, that is not every square inch of the parcel. There are spaces between the units, roads, open space, those things tend to lower the actual development potential for a given parcel. Does that make sense?

Commissioner Beamer replied it does. So then you are disagreeing with what Jonathan Scheuer said?

Mr. Nishimura replied the number they came out with is just a calculation of so many gallons per acre for a given area using GIS (Geographical Information Systems) methods. They added up all the areas and multiplied by a unit rate per acre. But that doesn't mean that when you take into account land ownership, roads, and other kinds of topography, archeological features you are not going to get that same number. He means full build out is really a conservative number. The good thing was that most of the island is considered non-sensitive, which means we can monitor it but we don't have to go into the level of detail like Keauhou. That's why we're moving onto the next level of detail. It will be really expensive to go through this effort on the whole island. So that's how we recommended to conserve the County's resources.

Mike Matsukawa testified he wanted to bring a different perspective to the issue. He's an attorney by training and does a lot of work in land use and environmental law. Some people put me on the people's side, some people say he's anti-development but actually he is in favor of the rule of law. With that perspective he

gave some background like a refresher course 101. Article 1 Section 1 says that the State and all of its political subdivisions are the trustees of the public resources. That means the State and the counties are the trustees. He thinks the petitioner has tried to make seem like the State and this Commission are the sole trustees and that the counties should be ignored because of their behavior. But the legislature when it passed the Water Code remembers these constitutional settings and states that the Water Code shall be interpreted liberally and applied in a manner which conforms with the intentions and plans of the counties in terms of land use planning. When he read the petition it surprised him at what he saw and that is why he is speaking in opposition to the petition. The petition says that the area that is harmed or threatened is the Park and its nearshore waters. As an afterthought, they say the remainder should also be examined as for harm. The remainder is the area all around the Park. The people who occupy, use, own, and have interest in the remainder have not complained their interests are threatened. The petition also continues that the Park has been frustrated through the environmental review and land use permitting processes. But he has been here a long time and he doesn't recall the Park getting heavily involved in contested case proceedings which were made available or in direct litigation to question the County's land use decisions. He has had clients that have gone through the whole process that led to Ka pa'akai, they had to step in and litigate the issue. So the land use process has its remedies. What the petitioner is saying is they feel dissatisfied with the remedies available; therefore, they are coming to this Commission. He looks at it as the Park is not happy with the Commission's co-trustee, who is the County, so in coming to you they are saying overrule your co-trustee. But the legislature and the voters have said you have to work in a cooperative coordinated manner. You have heard a lot of testimony coming from the County and people who live, own, and occupy the remainder. He trusts the Commission uses its judgment because this is a very important precedent. Is the petition a form of remedy to bring a grievance over land use?

Commissioner Antolini asked under his testimony about 174C-41 about the area, does he have any thoughts about having or is he suggested maybe a smaller area be designated?

Mr. Matsukawa replied he sees that as a false premise on the petition where they are saying because this small area is threatened we should therefore regulate the entire region and call the entire region the threatened area. There are false assumptions in that kind of argument.

Commissioner Antolini wanted to understand Mr. Matsukawa's position better by asking does he have any further guidance on what constitutes a management area?

Mr. Matsukawa replied he will try his best, he only had 3 minutes.

Bo Kahui (Laiopua 2020/VOLMA) testified he is the director of Villages at Laiopua 2020. Laiopua's mission is to create business opportunities and social, educational, recreational, cultural, and medical services. They are currently in a partnership with West Hawaii Community Health Center. They have currently constructed about a 50,000 square-foot dental and medical center, of which we receive approximately 10 water credits. Laiopua 2020, the Villages at Laiopua and its Villages of Laiopua Master Association opposes the petition. They oppose because of the effects that designation would have on their community development plan. We are on standby right now about \$1M dollars they are going to invest in their community center. The Department of Hawaiian Home Lands (DHHL) is the owner. We are the

beneficiaries. Earlier on in 2000, the Department of Hawaiian Home Lands (DHHL) held a completely new initiative, which gave the beneficiaries of each homestead to create economic development and create opportunities for self-sufficiency. Those opportunities include creating commercial centers and community centers for both the Native Hawaiian community and welfare of the region. In addition to that, we have been given a lease for a 26-acre commercial property to foster, generate income and have a revenue stream to support those services. This petition will impact these opportunities for us. They are the verge of breaking ground for the community center they have been envisioning now for over 10 years. They broke ground in January of this year for their medical center. It took them awhile to get water. By any means from the testimony heard here and the water credits the County does its due diligence to protect the water resources in this area. We respect that. The Department of Hawaiian Home Lands (DHHL) reservations rights and indigenous entitlements will be exercised whether there is designation or not. There is a constitutional entitlement for Native Hawaiians from kingdom law where water was never treated as a commodity. But it is our resource. We've been given this special entitlement as the native people of this land. Yet today, neither this Commission nor the County has found ways to exercise their reservations. There might be a mechanism the Commission has but that long process based on what he has seen puzzles me on how anything gets done. Which again leads him to his point that the effects of this designation will then defeat what they have been doing all these years. We are very concerned. Precautionary measures that the Commission might take related to the designation he thinks is hewa. You cannot say this thing never work lets go look at this other reason why. And maybe this other reason why makes sense we going do that because we can take that precautionary measure and say it's all ok. No, it's not. We stand by the scientific evidence presented to the Commission by your own staff as well as the other public entities to which he believes there is no evidence today that will substantiate, provide fact, or empirical evidence that would lead to designation. We stand firm in opposition to designation.

Commissioner Starr asked if Mr. Kahui knew about the Department of Hawaiian Home Lands (DHHL) reservation requests.

Mr. Kahui replied the Department of Hawaiian Home Lands (DHHL) is in a better position to answer that question. He thought they have bigger issues in regards to entitlements on how Hawaiians are going to get water.

Commissioner Starr asked if Mr. Kahui was aware of the reservation request filed on November 17, 2014.

Mr. Kahui replied looks like a proactive approach.

Commissioner Beamer asked about reservations with examples on Molokai and there is a larger question if you need designation to get a reservation, but he will say that at least the designation helped the Department of Hawaiian Home Lands (DHHL) get a reservation. He understood from Mr. Kahui's testimony he had breaking ground issues.

Mr. Kahui replied designation as to providing a mechanism for reservation rights under designation is one thing, but what about all their other homesteads that don't have designation? The pertinent issue here is not about designation, it's about their constitutional right. So our exercise of their right can happen outside of

designation. We don't need designation. We need to find that mechanism and work with the County and the Commission to set up that mechanism.

Chair Aila asked to move on and for testifiers to be brief.

Mary Begier (Member of Executive Committee of Hawaii Association of Realtors Board) testified she also had the president and their government affairs director here from Oahu today to impress upon the Commission the seriousness they take this matter. Seriously, this is a matter of home rule. She referred to the written testimony in opposition to the petition submitted and will end her to say they really believe in home rule and would like to see this stay at the County level and ditto the Mayor's comments. Thank you so much for your volunteerism and we are really blessed to have a diverse group to work for us.

Thomas Yeh (Counsel RCFC Kaloko Heights) testified he already submitted written opposition to the petition. As Mr. Greenwell indicated to you about a 8 ½ month old baby. For some of us we have a child already. In this context, the Commission is taking custody away from the parent and also the child. In any situation like that, in order to do that you need to follow a process and have evidence. In this case here the process, particularly with respect to the authorized planned use, there are these models about using the general plan, existing zoning; that's not the standard. If you take a look at the Commission's own statute and rules basically the definition of authorized planned use, the Park has tried to foist the Commission into this zoning and community plans model, but the definition of authorized planned use means the projected use of water by a development – not by all the existing general plan designations that are out there. So the focus of where you are with respect to the issue and criteria of sustainable yield has to be focused on that definition. A development that has the proper land use designation and county development. Moving on to the substantive component, Mr. Matsukawa raised a good point, which is NPS (Park) is saying in this area they have this concern but the scientific evidence by their own admission is that they are not being adversely affected. So in the context of where we are standing here right now, you take a look at the preliminary findings of fact that staff has provided to you, basically the criteria has not been met. So, from that perspective in order to have this evidence to take that custody away you don't have it. The real determination needs to be a denial. There have been concerns raised, which the Commission is properly looking into like hydrologic studies or maybe the water use and development plan needs to be looked at again but at this point and time that doesn't equate to designation.

Nancy Burns (Nancy E. Burns PE LLC) testified she is a civil engineer and has worked in this community for 25 years. She was the engineer on record who worked for the first phases of the Villages at Laiopua and when those people got those homes it was very heartwarming. We did Christmas carols through the community those people appreciated their homes. She is concerned this petition will stop that kind of people barely in reach of a home from getting a home. She referred to her many written testimonies against designation. She is also very much involved with the Kohanaiki Project, which is adjacent to the Park, pulling out brackish water, freshening it, and using it for the golf course so they don't have to use potable water. So when the Park testified earlier she questioned Paula Cutillo because she had some concerns with the Kohanaiki wells. The concern with the Kohanaiki wells is that they are finding that the Park is freshening. All their petition talks about is sea level rise, climate change, increased salinity but in fact that's not what's happening. Use of water is actually helping to mitigate all of those issues. Their own petition

never addressed their monitoring plans. They came out with monitoring plans in 2011, it's a big document. These plans don't appear to ever have been followed. In fact, their environmental specialist didn't even know they existed had to call her about the documents. They are supposed to be using these to monitor their own property. That upset her and so she reviewed those plans and one of the quotes out of there was that land use in and around the Park can affect ground water quality by reducing of enhancing recharge to the aquifer. So they keep saying that using the high-level of water is going to impact them negatively but their own documents say that maybe not, maybe there will also be a positive impact. The geology and soil, or rock if you can find soil, is extremely porous. She thinks the Parks perception of the whole hydrological cycle and use of water is a little off, compared to her 25 years of experience in Kona. Also, they keep complaining they have no recourse that they need this management district because there is no other way for them to get attention but the Park says that in the absence of designation the Commission is powerless to protect the public interest in the state's water resources. In the face of reasonable perceivable threats to public trust resources the lack of designation coupled with the absence of effective enforceable management strategies greatly undermines the ability of the Commission to faithfully discharge its duties as custodians of Hawaii's water resources. The State Water Code states the Commission shall have jurisdiction statewide to hear any dispute regarding water use protection, water permits, or constitutionally protected water interests or where there is insufficient water to meet competing needs of water whether or not the area involved has been designated as a water management area under this chapter. So their whole premise that they can get no relief is a false premise. They can come to the Commission. So what is their objective? At one of the water round tables she asked the Park directly did they intend to contest every single use of water? I got two different answers. The Park superintendent said if it were a hospital or school maybe they wouldn't. The water resource attorney for the Park said they will contest every use of water if there is a project that needs water and it's in the Keauhou Aquifer they are going to have to get their water from a different aquifer. He suggested bringing it from the Saddle Road. Anybody that knows anything about this island knows that the Army trucks all its water up to Pahakuloa in the saddle. There is no water in the saddle that is readily accessible. There is no pipeline, there is no infrastructure. So that would essentially place a moratorium because the Park has admitted they will contest every single use of water. That is what the community's concern is, that you are going to have a David and Goliath against the full weight of the federal government if you want to build ohana housing. And that's where the problem lies. She has grandchildren that she wants to have a home here. And she'll have to fight with the federal government to get a drink of water.

Commissioner Antolini asked Ms. Burns to clarify the dates of the Parks monitoring plans.

Ms. Burns said 2011 and gave the titles of the Plans. She went on to describe and contrast Kohanaiki's monitoring efforts with the Park. She also added that the discussion of zoning, land use, and projected use - Kohanaiki is a great example of that where the petition has Kohanaiki zoning is resort, commercial, all that. Well that is never going to happen because the project has been reduced to 500 homes maximum. So some of the information in the petition is outdated and it's been negated by further agreements, good faith SMA (Special Management Area) agreements, they have not gone through all the documents that dictate what can and cannot happen on the land. So she thinks the petition is weak as far as trying to project what the water uses are because obviously that one project is much reduced.

Courtney Rivera (On Behalf of Elizabeth Maluihi Lee (Lineal Descendant/Kupuna) testified she was born Kealakekua and raised in Kahaluu and currently reside in Kohanaiki. The thought that we are here discussing the petition deeply concerns her but more importantly her ohana. She says ohana because she is here with the Commission and her youngest daughter Haleaka who is nearly 5 months old. By allowing this petition to go through you are essentially denying her the ability to possibly build a home based on the fact that the Commission has agreements to halt to permitting. Beyond halting permitting... (speaking to Commissioner Starr) do you want to elaborate? You are shaking your head. Did I say something wrong?

Commissioner Starr said Ms. Rivera said something interesting about permits stopping, but please continue.

Ms. Rivera continued saying she based that off of what people have told her from Oahu, Maui, and even Molokai. And Oahu, as we all have been educated today are well aware that the majority of their island is designated. However, she didn't hear anyone specify that the main problem was because of the sugar companies using water that was dumped. Once that was completed that waster was diverted to the rest of Oahu. In regards to Maui and Molokai there are still people waiting, 10 years on Maui, 20 years on Molokai. That's why when she says the Commission is possibly taking the right away from her daughter to be able to obtain a permit because you'd have to process all the permits for current users first before the Commission would be able to decide on hers. That also greatly impacts her family's livelihood because her husband is a contractor and depends on providing for his family by excavating and building and helping people live in this beautiful island we call home. She calls it home because this is where she was born, raised, and live. There is no other place she would rather be on earth. She takes it personally because her tutu, Elizabeth Maluihi. will always be with us throughout her days with her children and she shares her stories and her great concern and she was so disheartened and it brings her to tears because she would show her the trails she would use before there were any roads. She was a little girl that had vast lands of a'a fields not even knowing there was going to be a department of water commission. They would have to go on their mule and pack up for weeks to the caves and explain the uses of these ponds. The fact that the Commission is saying that her descendants are not going to be able to enjoy those same qualities of land ownership. It's quite troubling because it is taking that away from our local home rule and taking it the federal government. She questions the Park's motivation. We are all concerned about the quality of the anchialine ponds and coastal areas because well all enjoy them for recreational uses. If the Park is so greatly concerned about the withdrawals from the aquifer and impacting the ponds, coastal reefs, and other resources on the Park's land then why aren't they restoring the character of the vegetation to that before non-Hawaiian introductions? We can go to Kohanaiki and look at the development has done for the restoration of ponds. She has never seen the ponds that way and now she sees them the way her tutu saw them. They are restored because you can actually see the water. When you go to the Park there are areas where the ponds are completely filled with christmas berry and other invasive species. We see the kiawe, which is soaking up ground water. The debris from these plants are changing the sediment in the ponds. She asked for forgiveness for not being a scientist, she may not be using the correct words, but that has a more significant impact directly than what is seen by every other scientist or person who is entrusted with the abilities to make decisions. Are we simply going to dismiss them? Are we going to say Hawaii Department of Water (HDWS), planning, and everyone else although we trust you on these issues it's irrelevant what you say regarding this. Who cares what the people of Hawaii say? Does it matter because this is what is going to happen. She thinks not. She thinks the Commission understands the state and the

certainty that is at heart here. She is **in opposition to the petition**. Rather delaying it would err on the side of caution especially with all of the misinformation that is out there. We have statistics that say there is nothing wrong and we have the other side saying yes it is.

Chair Aila asked if she could wrap up her testimony

Ms. Rivera said she understands and that she would just like to close saying she is in strong opposition and kindly ask that the Commission decline this.

Kele Makiau Kele testified on behalf of herself as a citizen. After listening to most of the presentations over the past year, in her opinion, none of the criteria for designation have been met. Therefore, she is opposed to designation of the Keauhou Aquifer System. As a concerned citizen as well as a lineal descendent on these affected ahupuaa, none scientific research she's heard supports any current or even projected impact proves adverse effects on the resources of the Park. There has been a significant amount of hypothetical and theoretical evidence presented by the Park, but in her opinion there is no hard evidence proving any potential impact. That said, it is not a theoretical or hypothetical forecast that the impact of designation on their community and economy will be significant, drastic, and wide-reaching. Her husband is a plumber, herself, her sister, her father, her brother, all work in construction. We're only one of a plethora of similar families in this area. She wants her children to be able to live here. That is not an unreasonable expectation. The Hawaii Department of Water Supply (HDWS) has made it clear that designation will postpone installation of new water services. That will instantly increase home prices purely on the laws of supply and demand. Thereby pricing the average Hawaiian family out of a home. She's not a scientist so fortunately it's not her decision, it is the Commission's to discern whether or not the data presented this past year proves potential adverse effects. She humbly asks that Commission consider the significant and immediate adverse effects on the families of West Hawaii while deciding on the speculative future effects on the Park. In conclusion she reiterated the high testimony in opposition.

Chair Aila asked the next testifier to keep his testimony on designation.

Abel Lui thanked the Commission for being patient with him and he's been patient with the Commission. He made a hat while he was waiting. He testified about the water the Park. The Park has about 144 projects. And they say sure they get money. Doesn't that tell you something? We talking billions of money. They trying to show none of where that money went. Now they want to be in charge of the water. When the State is not even in charge of the water or the County, because you guys don't own the water. The water is underneath the Hawaii Kingdom. The laws and the treaties are still here. It protects us.

Chair Aila said we're talking about designation.

Mr. Lui replied because us, the kanaka, we get 33 1/3 % of the water. Think about that. Every time I come over every island, every homestead, you guys talk about all these kind benefits. They lot of lies. And everything that goes from the mountain to the sea. He lives on the aina. He doesn't know anybody that lives on the aina. I live here for the last 25 years. If you going look at Kau, all the trees, the water that you when give to them. Same thing, he went to contested hearing on the water to go Hililoa

Chairman Aila asked Mr. Lui to stick to the petition.

Mr. Lui replied this is about the Park. Now, they retain the water. They get overflow twice in one month. 8 feet of water when come down and over the bridge. This is what is going happen over here. You guys going get all kine problems. The water is coming down from the mountain. What is going happen to everybody with all your guys plans? What you going do with all the water? The Hawaiian Kingdom is still alive. Hold it no interrupt.

Cross-talk between the Chair and Mr. Lui

Chair Aila again reminded Mr. Lui to keep his testimony to the issue of the petition.

Mr. Lui replied you guys still never deal with us yet.

Chair Aila again reminded Mr. Lui this is not place for this.

Mr. Lui replied but this is about the water.

Chair Aila again reminded Mr. Lui it is about the water with respect to the petition to designate the Keauhou Aquifer as a water management area. That is what is before the Commission

Mr. Lui replied the water that comes down here affects everything. It affects the birds. It affects the pig. It affects you. It affects the future. It affects now. The decision we make today over the water. Everybody is watching this.

Chair Aila again reminded Mr. Lui to talk about the petition.

Mr. Lui replied the water belongs to the people that live on the aina, for the taro patch, that's where everything lies. The subdivision of everything that's something else.

Chair Aila asked Mr. Lui to wrap it up.

Mr. Lui replied see you guys. He going leave you something (a piece of written paper), she had to go to another meeting, she had to go to the doctor. Mr. Lui read the – "The native tenant and counsel Shirley Mai. I apologized for not being able to speak to you all and have Abel read this to you folks. Number 1, the National Park Service it is not their property to preclude a native tenants water rights. Number 2, the Park must not limit..."

Chair Aila asked if there is anything in her letter that talks about designation and about supporting it or opposing it.

Mr. Lui replied she oppose this.

Chair Aila asked that Mr. Lui not read the rest of the letter just pertinent to designation and summarize it.

Mr. Lui replied no develop the land if the land titles are clouded. The Park does not enforce property laws of the land or support their illegal growth use of the land.

Chair Aila said that this is starting to get off the subject. There are plenty of people waiting.

Mr. Lui replied Number 4 because water, aquifilter, appreciation, doesn't include proper enforcement of HRS 172 the rights of the heirs and the royal patent.

Chair Aila said that this is off the subject so...

Mr. Lui replied this has to do with water.

Chair Aila said that Mr. Lui is saying is not about the petition.

Cross-talk between the Chair Aila and Mr. Lui.

Chair Aila said there are lots of people who want to testify and we are going to run out of time pretty soon so to honor all the other people waiting around with you...

Mr. Lui replied ok, Number 5. The Park

Chair Aila asked Mr. Lui to stop.

Mr. Lui replied that's the water.

Chair Aila said he was cutting Mr. Lui off.

Cross-talk between the Chair Aila and Mr. Lui.

Chair Aila said you're not listening, sorry, but you are not listening. Out of respect to everybody else in this room we gave you time with the hope you would summarize because that's what you are supposed to do but that is not what you are doing so...

Mr. Lui replied he was going to submit the paper, ok, just remember you guys all responsible for your action. Talk to God.

Chair Aila said mahalo

Mr. Lui said let me tell you guys something, I was the guy who when contest the union on the water. The very next day, I went Honolulu, he was the in the newspaper and told to design all of that. Thank you. The Hawaiian Kingdom is alive and still here.

Marjorie Ziegler (Executive Director - Conservation Council of Hawaii) testified on behalf of the 5000 members statewide for the organization. She lives in the ahupuaa of Kahuluu Oahu and is very happy to be in Kona. Their president, Hannah Springer, left hours ago and she was going to testify as a kamaaina o Kapululu, and their vice-president Julia Aloha from Hilo but she's worried about the lava flow at her house. The organization is in support of designation and the reason why is that and she has a little bit of experience with designation when she worked on Windward Oahu. It's a very interesting process. My finding there was that it was a very difficult process to go through but once it was decided to designate it became a fair process for everybody to put their uses out on the table and for us to figure out the best uses were in the public interest. It's a good process. We found it didn't stop development on Oahu unfortunately, but that was not the purpose of the petition. It does not stop your development and to some people that was a disappointment, but again that was not why they petitioned. They petitioned to protect non-consumptive uses such as kalo and like your situation ground water discharge into Kaneohe Bay to support fisheries. These were very important to their clients. Right now the Conservation Council is a wildlife organization so they are speaking for the birds and the opacula. We want to make sure the anchialine pools and the fish ponds; also the habitat for the endangered water birds; she has not heard much about the water birds. She did not hear any mention of the water birds in the findings of fact and she hopes the Commission remedies that. There are only 2 major wetlands for endangered water birds on this island. Aimakapa is one of them. The other is Waiakea Pond in Hilo. We are hoping ground water that is necessary to maintain these wetland habitats is protected in addition to anchialine pools. We did a poster for the school and wanted to point out if anybody would like it we are happy to mail one to you, we have hundreds of them. They are very nice posters of the anchialine pools on this side of the island. Hannah Springer also wrote a very nice article in their newsletter about what she calls the Waiopae, which is a different name for the anchialine pools. We want to remind the State that they have a duty to protect endangered species including the coot and the stilt. And then of course the migratory birds. They are also wondering if underground springs have any protection. In Leeward Oahu they have over ground streams and they have interim instream flow standards and those were protections for the streamflow at a certain point in time. In this case, you have underground streams that run to the ocean and it's curious to her that there isn't a whole lot in the Water Code about underground streams. So her question is how much water do they need in the underground streams to support the ecosystems or native species in the anchialine pools. Do interim instream flow standards or permanent instream flow standards apply to underground streams. If the Code is silent on that was it deliberate, was it meant to be that underground water that flows into the ocean or springs for people to use in their homes are excluded and not give them any protection? Last, she pointed out someone said there was a court case where the supreme court overturned the Water Commission decision and the court found the ocean flows are necessary for Hawaiian customary practices and that reinforces that even though it is underground it's important to near shore fisheries or ponds that support the traditional and customary practices. So they are speaking for wildlife but are also concerned about other non-consumptive uses such as habitat and even consumptive uses such as reservations. She thinks you can reserve in a non-designated area but she thinks it has a better chance of being fulfilled and accommodated in a designated management area. And lastly wanted to point out that initially some crafters of the Water Code back in 1978 anticipated that all uses would be treated as if the areas

were designated. In other words, everybody would come to the table, here's my use, here's why it is in the public interest, here's why I am not wasting, here's why you should give me a permit to use it. And it was political compromise to bifurcate the Code into designated areas and non-designated areas. Designation is not the end of the world. She feels for the community because she knows it's threatening and hope if the Commission moves toward designation or even if it don't there is outreach to the community on what designation does and what water use permits entail because they are not the end of the world and it doesn't mean you are not going to get water for future uses. It just means you have to show it is in the public interest and you're not wasting it and you're not harming your neighbor.

Janice Palma-Glennie (Surfrider Foundation – Kona Kai Ea) testified by reading her written testimony in support of the petition.

Brian Bohard testified he has been in this ahupuaa for almost half a century. My father grew up in a fishing village in Punaluu. When they moved here it was all about learning the concept of conservation doing the right thing. Doing the pono. Don't rush into it, be patient. What he has learned the most from people is that people meant the most. He is in opposition of the Park's petition because he believes everyone has spoken so well, even those who are for designation. If the Commission is going to do a designation then just designate the County as they know what they are doing. Obviously, they already have a framework for doing a lot for reserving high quality water, promoting water conservation, and they are increasing their monitoring so that we can have sustainable yields. They are already doing their job, they are familiar with this place. I know our Mayor came to speak this morning. In the past years he's watched how this man's leadership has been really infectious. He's approachable. He has closed the gap between community and government – that communication sometimes gets lost. It's about talking and being approachable as he is. All of his staff members they are following that leadership model. He works for the State as an educator. All of us are public servants. Our job is to support the people. He sees the County doing its job and that's really important. When it comes to their familiarity with what is going on here and the fact that they like to mediate. They like to say come in and let's talk about this. Because that helps to gain common ground. We really find out we're more alike than we are different. They are already doing that job. They already have access to the right people, the right sources. He believes the County is doing a good job. They have their priorities in order. No one will disagree that water is an important resource. We all believe that and one thing we all agree on. We cannot live on this earth without it. The County is about taking care of the most precious resource, that's the human resource, that's the community. He urges the Commission if not deny then defer the petition so that there is more communication between the Park and the County. We all love this community, we are all blessed. Less is more. If the Commission can somehow mediate or coordinate the Park and the County to come together and discuss things a lot more it would benefit them greatly.

Shannon Rudolph testified that Janice Palma-Glennie said most of what she wanted to say. She wants to reiterate that there are water management areas in other parts of the State that hasn't stopped development. A lot of people she knows that would have liked to come to this to speak in favor of the petition from the Park but they had to work. A lot of people here today were on the clock and a lot of her friends couldn't come to speak. They thought the meeting was over at 4:30p so they couldn't come. The scare tactics used here about the Hawaii Department of Water Supply (HDWS) cutting off meters. Nothing is further from the truth. It's upsetting to hear something like that, it's not true, the regular person on the street hears that and

they get all up in arms – it's all a bunch of bull. She agrees with the U.S. Geological Service that confirmed the State's obligation to apply the precautionary principle to designate. People who already sent in testimony in favor of the Park's petition, which she hopes the Commission will continue today and that is she agrees with the Conservation Council of Hawaii, the Hawaii Council of Civic Clubs, Kahea – the Hawaiian Environmental Alliance, the Kona Hawaiian Civic Club, the Surfrider Foundation, the Sierra Club, and the National Parks Conservation Association. We know the Commission will continue this process it's the prudent thing to do.

Greg Chun testified by summarizing his written testimony that designation is premature. He emphasized his three potential actions for the Commission to consider and focused on one, the late Steve Bowles' suggestion of an Independent Water Resource Management Council (WRMC). Whether this proposal is feasible or not is the subject of debate but where Steve was coming from was to address something that is disconcerting to Mr. Chun and raised in the alternative actions in his written testimony: continued reliance on resolving issues of development and resource management through quasi-judicial adversarial processes such as land use reclassification, zoning, and permitting will continue to lead to sub-optimal resolutions and divisiveness. Steve was advocating some form of an independent body whose role would be to advise decision makers on the health of the resource would help ensure a result of tempered solutions. In closing and based on the precautionary approach, he believes designation is premature, not supported by the data, as such designation is disproportionate to our knowledge of the risk to the resource at this time. However, consistent with a precautionary approach, the Commission can use its authority to make happen and encourage a variety of activities listed in his written testimony that encourage better science and more data in the problem solving process.

Commissioner Antolini asked if he submitted his written testimony.

Mr. Chun replied that he submitted it on Monday, so hopefully you have it.

Riley Smith (Lanihau Properties) testified in opposition to the petition and read his written testimony.

Chair Aila made some comments about trying to be fair when Mr. Smith got to his written testimony about Elizabeth Maluihi Lee and her inability to testify.

Mr. Smith replied that the Commission allowed the Park sympathizers who are not from the ahupuaa speak before Aunty Elizabeth who is from the ahupuaa. She's 86 years old, she stayed for 3 hours last time and the Commission did not let her talk, she stayed here for 5 hours today then she went home, so her son spoke, and then her grandchildren spoke. So he wants to Commission to understand the perception of the local folks in Kona how the people from Oahu come here and don't necessarily make a level playing field. It's a concern to him to share with the Commission. The Park says it's not their intention to stop a lot of things in this area, but that's the outcome. Mr. Starr, as you are the designated person to manage traditional Hawaiian and resource practices on this Commission. Aren't you?

Commissioner Starr said no, Kamana is.

Mr. Smith apologized he thought Commissioner Starr was, so he directed his concerns to Kamana.

Commissioner Beamer apologized that Ms. Lee did not get a chance to testify, obviously coming here and having her go first would have been best. So he did get a chance to talk with her family.

Mr. Smith asked if it was on the record or did he talk to them outside?

Commissioner Beamer yes, on the record.

Mr. Smith asked if her Brother Robert testified.

Commissioner Beamer on the site visits to Kaloko.

Mr. Smith said his concern is that on these site visits he is not sure all the Commissioners had equal access to information. You have a new commissioner, she mentioned a couple of times she didn't know about Senator Shatz's letter. She's mentioned other comments that people have given testimony that she's not sure if those papers have been handed out. He handed out copies and isn't sure if you got them, you do, good. It's just that she didn't have Senator Shatz's letter and she asked Mr. Tam for it he dug through his files, he really thought that was something would have been issued to all the commission members.

Commissioner Antolini said she appreciated all his testimony, and she apologized she is not as familiar with all the past testimony and is catching up as fast as she can. It's really important to all of you in front of her that's why she's checking the papers and she apologizes and it's all really important to her so maybe she's making some mistakes but she's getting there.

Mr. Smith recognized Commissioner Antolini just started so they don't expect her to know what happened 3 months ago.

Commissioner Antolini she has been going through the record but it's not the same as being there. She will do her due diligence to catch up. Can't help it if she just got on.

Mr. Smith said when you make a decision it has to be an informed decision and if she hasn't had the opportunity to be briefed on all the information he questioned whether it is prudent for a decision to be made today.

Commissioner Antolini assured Mr. Smith the Commission has been very helpful in briefing her and bringing her up to speed.

Mr. Smith asked if there were minutes she reviewed?

Commissioner Antolini replied the video, and in the process of reviewing everything on the website, so she is doing her best.

Mr. Smith said part of the concern is that part of the site visits included tours that occurred in the van. That was not being filmed. Roy Hardy was giving testimony to the Commissioners that were driving around in the van.

Chair Aila said there is a forum if you want to contest a procedure that occurred, if you want to question the integrity of the process it is your right to do so but there are other avenues to do that.

Mr. Smith said that a complaint was filed with the office of information practices about the violation of the sunshine law.

Chair Aila said so let's go through that process.

Mr. Smith said sure and continued reading his written testimony. He added the Robby Robertson who was the representative for Senator Shatz talked about the mediation for the U.S. Fish and Wildlife Service for critical habitat. The Park participated in that process, Peter Adler assisted in the mediation to a mediated solution that they all agreed to. Lanihau was pleased as was most of the land owners that were involved in that effort. There were some questions today about whether the Park is willing to mediate. I was participating in a forum in the Waimea Community Association on November 13, 2014. Jonathan Scheuer, Tammy Duchesne, and Jeff Zimpfler were there when that question was asked of them, Shari Bracken was moderating, and they said they would not mediate. That's why they gave long vague answers to that question. That was 3 weeks ago. That's all he has.

Commissioner Beamer assured Mr. Smith the Commission is trying its best during this process and the site visits were a change to get his colleagues a chance to see the sites. So thank you for your testimony and all the conversations we have had.

Mr. Smith replied he is just unclear about what the rush is. The Park has said there is no impact, no imminent harm, why do you have to vote today? He suggested the Commission defer.

Stan Fujimoto (Hawaii Housing Finance and Development Corporation) testified to make a couple comments in response to earlier testimony, he didn't submit written testimony. First item is he concurs with the counsel for the Hawaii Department of Water Supply (HDWS) that the responsibility of this Commission and the focus of the Water Code is the protection of the aquifer whereas the focus of the Park's petition is the Park's assets. It is not the same thing. The Park's petition is misusing this designation process. The second comment has to do with the County General Plan. The General Plan is a policy statement by the County where development can occur not where development will occur. It is the first of many steps before you can actually develop a project. If you change the development plan, you need to change the Land Use Commission District, you have to change the zoning, you have to get sub-division approval, you have to get PDA approval before you get a building permit. He submits if he had land in the general plan that proposes to use water above the sustainable yield someone along the way before the project gets built is going to stop it. So this is academic and it will never occur.

Chair Aila said last chance, any other testifiers?

Ken Kawahara testified as an individual opposed to designation. He believes it's premature. He wants to be clear he is not against the Park as he has met many of their hardworking staff. He disclosed that he is the former deputy director to the Commission and he is an engineer for a local kamaaina firm Akinaka &

Associates. Some of his clients include the Department of Land and Natural Resources (DLNR), the Department of Hawaiian Home Lands (DHHL), Lanihau Properties, Palani Ranch, to name a few. During his tenure on the Water Commission he & staff started the water professionals working group comprised of scientists and other water professionals. Also during his tenure the Commission also adopted the current Water Resources Protection Plan (WRPP). He & staff recommended to designate the surface water hydrologic units of Waihee, Waiehu, Iao, and Waikapu streams commonly known as Na Wai Eha. So he is aware of designation and the water use permitting process. If the aquifer were to be designated his firm would probably have an advantage based on his experience. Is that the right thing to do? He reiterated he is testifying as an individual and not a paid consultant. Although he lives on Oahu, he has been observing this issue for many years and testify on behalf of my family from Kona. His father was one of 12 born and raised on a farm up mauka. They lived off the land by farming, hunting, fishing, and gathering along the coast. The pictures that he shares with the Commission are off my family gathering along the coast. This issue is bigger than just his family. It affects many families in the community. This issue has been divisive and not good for the Kona Community. It is his professional opinion that it's premature. He bases his opinion on reviewing the science. Former Commissioners have publically stated that this is premature. These are the same Commissioners who supported staff's recommendation to designate surface water on Maui he spoke about. It would add an unneeded layer of water use permitting that is really not necessary at this time. It would cost the community much time and money. His cousins are working multiple jobs to make ends meet. That is why they are not here today, and asked me to testify on their behalf. There is enough water for everyone to share for the consumptive and non-consumptive uses. One question that hasn't been asked and is curious to see what the answer is - is how much water is needed for non-consumptive uses? That question was asked when the East Maui instream flow standards were set. The staff looked at different models and by running different models they were able to determine how much habitat would be restored. So we've had a lot of discussion on the consumptive uses, but haven't heard much about how much is needed for non-consumptive uses. So he thinks that would be something good to model. There has been much discussion about a comprehensive monitoring plan. He thinks that would be good for all stakeholders to come together. Maybe the water professional working group could be that and really look at the science. If it's not necessary now, when will it be in the future. Put in some trigger mechanisms. It was during his tenure the well construction and pump installation permits that he & staff required the monitoring wells that were spoken about on the Kohanaiki Project. He has never been involved with the Kohanaiki Project. At that time, there was a lot of discussion if that was a good thing to do. In hindsight he thinks it was and a lot of data has been gathered since those monitoring wells were put in. And he would encourage more monitoring wells to be put in around the Park. A lot of modeling can be done, but the model is only as good as the data that goes in. If you ask the Commission staff they can brief you on their thoughts about more monitoring wells throughout the State. He spent many nights in front of the finance committees at the legislature asking for money for monitoring wells. It was very difficult to compete with other priorities such as education. Many times he was alone asking for that money. He would appreciate if members of the community, Commission, the staff can push for more resources to do the monitoring that needs to be done. This is an opportunity for many people to come together. It doesn't have to be divisive. It can bring people together to study as way to look at this.

Commissioner Starr thanked Mr. Kawahara for attending. He certainly agrees with monitoring and certainly a lot of communication. He's heard a lot of things that are creating a lot of angst, discord and concern in the community. It seems that testimony from Hawaii Department of Water Supply (HDWS) has been saying that

if designated they will stop issuing water meters. He questions whether that is consistent with what has happened in the past. So from experience as serving as deputy in the past do you think that is a realistic scenario the Hawaii Department of Water Supply (HDWS) will cease to issue meters upon designation.

Mr. Kawahara replied he thought that is a legal question and they address it with their counsel but as far as the Iao designation and what happened with their water meters when he came on board the Water Commission it was already in contested case and outside of the hands of staff so he is not familiar with what happened with that and the designation process when it came to what they decided for the Maui County Water Supply in issuing meters.

Commissioner Starr said they never stopped issuing meters but you said there was a contested case?

Mr. Kawahara replied on the ground water management area.

Commissioner Starr he didn't recall a contested case on that, but thanked Mr. Kawahara for his testimony.

Chair Aila closed public testimony and recessed for a 5 minute break. Chair Aila reconvened the meeting for Commission discussion.

## **Commission Discussion**

Commissioner Pavao said in light of and based on all the testimony that occurred and heard tonight he wanted to make a motion to deny the petition.

Chair Aila asked for a second to the motion.

Commissioner Buck seconded for discussion purposes.

Commissioner Buck said at this time he was not comfortable moving forward with designation, but said he thought there were opportunities to extend the investigation. He suggested an agreed upon timeframe to develop a good faith agreement between the County of Hawaii ("County"), the Kaloko-Honokohau National Historical Park ("Park") and the Commission; develop benchmarks for the scope of work with Water Use and Development Plan ("WUDP"); for a complete WUDP for Kona. He said this could be achieved within six months, after which the Commission could make a ruling. He reiterated that he was not comfortable with formal designation at this time.

Commissioner Starr spoke against the motion. He did not feel it's the right action. There are issues that should be looked into and discussed, including the science and outreach. There are other processes that need to be done.

Commissioner Pavao said well-respected scientists have testified. It is obvious from the criteria for designation there really is no merit. Not one of the 8 criteria has merit as far as he can tell. The Keauhou aquifer is healthy and sustainable yield is and will be adequate for a long time even with the authorized

use. To him none of the basic 8 criteria have been met. A very good point was made that designation should be about protecting the resource, not about protecting the Park. We are talking about the sustainable yield of the resource. Was designation made to protect and individual or protect a business? It's not to proper use of this process. During this process a huge amount of time and financial resources has been expended. He knows money should not be considered but that's the reality and thinks it's time to stop the financial game. Continuance of the process would also create more work for Commission staff that is already overworked. Again, that's no excuse, but that is reality. We should move onto using the Commission's financial resources for something more productive. No evidence has been presented that calls for designation. He reiterated his motion to deny the petition.

Commissioner Beamer thanked the public and scientists for their testimony. Overall this has been a good process. It is unfortunate that it has come out in a contentious fashion, but water is a contentious issue. He said he was struggling with authorized planned use. The year 2030 is not that far away. He said he was in opposition to denying the petition. Several criteria may merit designation. The Commission should look at authorized planned use in more detail. There are definitely "serious disputes" about water. The Commission plays a role in providing clarity and the public has shared a lot of valid concerns today that may be based on misinformation about not issuing timely permits, severe economic decline, issues he's not for regarding economic or social development. The Commission should work through this to clarify what is truth and what would happen if the aquifer was designated so the concerns raised by the public can be clarified. He recognized other islands have different opinions about designation. He said he hopes there is a way for mediation or other way to work through this and appreciates everyone's opinion and points of view. He said he is not in a position to deny the petition. At a very minimum we should continue the process.

Commissioner Pavao said the petition is grossly premature. Nothing prevents the National Park Service ("NPS") from coming back at a more appropriate date. In the meantime, all the questions about sustainable yield, the authorized planned use, and the health of the ponds can be looked at closer. So denying the petition does not prevent NPS from coming back at a more appropriate time. If you look at sustainable yield, the authorized planned use, and the health of the ponds this petition is extremely premature at this time. If designated the Commission staff would be saddled with additional work and development in Kona would be stalled for the next two years to get everything documented for permits. Designation will stop everything for two years. Can Kona afford to have contractors and builders out of work? No permits will be given, no wells will be drilled nothing will be happening. Can you see Kona suffering for 2 years?

Commissioner Beamer said he does not want to harm the Kona community and asked Commission staff to clarify the process after designation. He said the County is doing a great job but he still struggles with some issues like the connection of the high-level aquifer and the basal lens, the fact they are pumping water that has high chlorides. Designation doesn't have to be a negative thing.

Commissioner Starr disagreed with Commissioner Pavao. He said it is not pono to perpetuate a myth that designation would stop the issuance of water meters, construction, new projects, and housing. This has not been the case in the past and is not likely to be the case in Kona, unless the Hawaii Department of

Water Supply (HDWS) wants to use it to set an example or some kind of statement for their own means to an end. He also felt the issue hasn't ripened to the point where it would be the right time because there is so much controversy and misapprehension about designation. Whatever happens there needs to be clarity and a process of understanding and educating what this is about and what designation will lead to. He reiterated his stance against the motion.

Commissioner Pavao asked Commission staff to explain what would happen after designation.

Chair Aila asked for a one-minute description.

Roy Hardy (Branch Chief, Ground Water Regulation) said the permitting is more complicated than the designation process itself. A flow chart that details the water use permitting process has been discussed at previous Commission meetings. Once an area is designated, there is a one-year period where existing users are established. Existing users need to apply for their existing uses, not their future uses, what they are actually pumping. Commission staff will then verify those needs as best we can through the process. That puts future needs on hold for at least a year. There is typically a 90-day review period for straight forward permits. More contentious applications with public hearing would require 180-day review period. At any point in the process there could be a request for contested case when it comes before the Commission, then the timeline can go on for a long time. Again, existing uses must be established first prior to entertaining future uses. So at least a year before future uses could be determined unless everyone came in early and existing uses are established under a year, but we've never seen that.

Commissioner Pavao asked if it would be a minimum of one year that no new wells could be drilled.

Mr. Hardy said new wells could be drilled, but there is no guarantee that a water use permit would be issued for that well.

Chair Aila thanked staff for the quick concise description and reiterated the motion and second to deny the petition to designate the Keauhou aquifer and called for the vote.

Commissioner Pavao asked how many times could he vote? (crowd laughter)

Only Commissioner Pavao voted "aye."

Commissioner Buck offered up a new motion based on part 3 of the staff's recommendation.

In light of the record and proceedings to date, and the Preliminary Findings of Fact, the Commission should extend the investigation and study period by no later than May 30, 2015.

- To allow important and ongoing hydrologic studies of the area to be completed and/or analyzed.
- b. Request that the County send a project description and scope of work for the revised Keauhou Aquifer Water Use and Development Plan (WUDP) to the Commission staff

by January 15, 2015. Commission staff will provide comments back to the County by February 1, 2015. The County will provide a draft of the revised Keauhou Aquifer WUDP to Commission staff no later than May 15, 2015.

c. Pending the outcome and the progress of the good faith negotiation between the County and the Kaloko-Honokohau National Historical Park, with participation from Commission staff, to explore alternative paths of action other than ground water designation of the Keauhou aquifer.

Commissioner Buck said the new motion provides reasonable benchmarks. He believes this issue can be solved at the community-level in a short amount of time, but clarity is needed.

Commissioner Starr seconded the motion for discussion.

Commissioner Starr recommended amending the new motion to include that the Hawaii Department of Water Supply (HDWS) provide a plan with a timeline and funding sources to improve source and transmission infrastructure that would eliminate issues with chlorides and potential interference between wells.

Commissioner Pavao asked about the timeframe.

Commissioner Starr said he would like to see a framework by May 2015.

Commissioner Pavao clarified for what timeframe of development. 1 year? 2 year? 5 year?

Commissioner Starr said he doesn't know how long it would take to build it, but them to show the intent to clear up the chloride problem and make sure that wells will be properly spaced in the future.

Commissioner Pavao said the construction and updates to the DWS infrastructure to take care of chloride problems will take years and cost millions of dollars. They cannot do that in a year.

Commissioner Starr said long journeys start with a small step. All he wants is a framework.

Commissioner Buck said the timeframe is for when HDWS sends the Commission their plan. He restated part (b) of his motion. He said the Keauhou Aquifer WUDP could be used as a template to move forward at the local level and address some of these concerns. The scope of work could be provided in a short amount of time, 6 months or this summer. Hopefully good faith negotiations between the Park and HDWS can also take place at the same time.

Commissioner Pavao still had concerns about the timeline.

Keith Okamoto (DWS Deputy Manager) interjected and said the timeline on the framework depends on the draft scope. He said the draft scope of work for the revised Keauhou Aquifer WUDP was doable by January 15, 2015. Then the Commission is challenging the staff to send a response by February 1, 2105.

Commissioner Buck said exactly.

Mr. Okamoto said there could be potential challenges if there are a lot of dramatic differences with the current scope of work being done by Fukunaga & Associates for HDWS. Without getting a final draft by May.

Commissioner Buck said a draft.

Commissioner Pavao asked Commissioner Starr to clarify his recommendation.

Commissioner Starr said he wants to see an outline of what the County intends to do over the next several years to replace sources, add transmission, improve the well infrastructure, and plan the spacing of future wells. There needs to be a framework to do that.

Chair Aila asked if HDWS has a plan in place to increase supply and replace transmission lines.

Keith Okamoto (HDWS Deputy Manager) said they do. On November 19 we presented to the Commission a North Kona well is part of the Capital Improvement Plan ("CIP"), but the actual site has not been identified. As you know, if you don't own a site it may take a while to do that. He said he can provide the scope of the CIP over the next five years and what has been accomplished so far.

Chair Aila commented that HDWS appears to have the storage capacity. The challenge will be how to get the capacity to where the demand is. He asked if HDWS has a plan to accomplish this.

Mr. Okamoto said a certain amount has been planned. Such information could be provided to the Commission.

Commissioner Starr reiterated his desire to see a plan to create the south to north infrastructure that the Kona community will need in the future to alleviate potential harm done by future pumping.

Mr. Okamoto said HDWS will provide their current plans. They are not going to build a well in South Kona to feed growth in North Kona. HDWS understands the hydraulics of their system and where the deficiencies are and will plan accordingly.

Commissioner Beamer asked about the spring discharge into the near shore waters and the impact on the public trust resources and traditional and customary practices. More information is needed on that. Does HDWS have a policy on that?

Commissioner Antolini suggested that everyone be given ample opportunity to respond to the questions and concerns raised today. She heard January 30, 2014 as a time for everyone be given to respond to issues raised today. It's not a direct answer to the question but how we should do it rather than the traditional testimony limited to today.

Commissioner Starr agreed and said he wanted to additional important stuff. He would like to see forward motion over the next four or five months for additional studies and paths to do more research work to ensure that future pumping will not affect the Park and other resources. If no practical framework has been created in the next five months, then a management area may be needed.

Commissioner Buck agreed with Commissioner Beamer's concerns. He reiterated his desire to see good faith negotiations between the Park and the County. He thinks there are tangible things that can happen. In five months misinformation can be corrected and start working together. New information will be good too.

Commissioner Pavao suggested delaying a decision until Don Thomas' study about the connection between the high-level and basal aquifer is complete.

Commissioner Buck said his motion allows time for important and ongoing hydrologic studies of the area to be completed and/or analyzed. We cannot wait forever for all the science to be published. He disagreed that the Commission should wait until the study is complete.

Commissioner Pavao commented that the Don Thomas study is a key factor in the allegations made by the Park that the results are very important.

Commissioner Buck said it could take 24 months to finish the study. It is not healthy to delay the process.

Commissioner Starr/Antolini/Beamer offered up a three part amendment to the motion.

- a. First, to allow the public to submit additional legal and/or factual information to the Commission regarding the petition no later than January 30, 2015.
- b. Second, to create a framework regarding the relationship between coastal discharge and the impact on traditional and customary practices.
- c. Third, that a plan for source transmission and other hydrologic improvements to the Department of Water Supply system be done and a framework for alleviating chlorides and the well proximity issues inherent in the system be put in motion.

Chair Aila asked Commissioner Starr to clarify his amendments to the HDWS staff.

Mr. Okamoto said they would need to see the formal recording, it's kind of long.

Commissioner Starr asked if someone could write it down.

Commissioner Antolini asked how much of Commissioner Starr's amendment to the original motion could be put into the revised Keauhou Aquifer WUDP.

Mr. Okamoto said they would need to see the recommendation and amendments written out.

Commissioner Buck said he hoped some of the comments made by Commissioner Starr could be addressed by the deadlines outlined in the original motion. He said the cultural issues may be difficult to incorporate into the scope within that timeframe.

Commissioner Pavao asked if the NPS could also be asked to provide additional information about non-consumptive flow into the Park by the new deadline.

Mr. Okamoto said it was still unclear what HDWS needed to do by when. He said the cultural questions may be more difficult to answer and apologized to Commissioner Beamer that they may not have an answer for his concerns and he would defer to Commission staff. HDWS's primary duty is deliver potable water distribution, which their public trust responsibility.

Commissioner Beamer said he understands and appreciates that but designation and the Commission considers other public trust uses too. Multiple court cases dictate to the Commission that cultural practices are also part of the public trust duties of the Commission. He asked if there was some way to incorporate the cultural concerns into the process and new recommendation.

Chair Aila clarified Commissioner Beamer's ask and said the impact of pumping on the spring fed systems should be investigated.

Commissioner Antolini said the new recommendation gives the public more time to submit additional information, which can include information about traditional and customary practices and case law, some of which the best comes from this area. We are asking for more information in this additional information period.

Mr. Okamoto said the impact of pumping on traditional and customary practices would be a major concern to HDWS, but said HDWS does not have the expertise to make that assessment or evaluation.

Commissioner Pavao said the NPS should address these concerns as well and what would satisfy them.

Bill Hansen (Chief of the NPS Water Resources Division) said NPS tried to do that in the petition but is willing to go back and look at the conceptual needs for natural resources or traditional and customary practices but he put a qualifier on that; they can't quantify them. That can take months or years based on other arenas. He said NPS would want input from the local community, but said they would do their best to meet the timeframe.

Chair Aila asked if the NPS can conclude how much water is needed to flow through those areas to meet the needs of cultural practitioners.

Mr. Hansen said that would be a tough challenge and the NPS is unlikely to meet the timeframe.

Jonathan Scheuer pointed to the written testimony submitted by the Office of Hawaiian Affairs (OHA) which discussed the issue of traditional and customary rights. They suggested that Commission staff conduct publicly noticed outreach meetings and other research to identify traditional & customary practices that may be impacted by reduced ground water discharge to the coastal areas of the Keauhou Aquifer System Area to facilitate future Ka pa'akai analysis required for water management decisions along the coast. From what he is hearing that is half of what Commissioner Beamer is asking and the other half he is raising is some kind of report from the staff that under the under the existing permit regime as well as permits issued under current designated management areas how Commission staff considers possible impacts to traditional and customary practices that are based on ground water flow to the coast. He hopes that is helpful.

Commissioner Beamer said Mr. Scheuer must be less tired than he is... (crowd laughter). That is helpful.

Commissioner Buck asked if the NPS staff could conduct such outreach and investigation.

Mr. Scheuer said he was only relating to the Commission what OHA had testified.

Commissioner Buck said that's a good idea but would the Park be able to do it as well to help the process.

Mr. Scheuer said he is tired as well but while the Park is concerned with their portion of the coastal area aquifer the Commission's responsibility extends up and down the coast so in some ways it would be the Park stepping into the Commission shoes to do that and then the second part is there needs to be a simple staff report looking impacts on traditional and customary practices and, if so, do you do that under well construction and pump installation permits.

Chair Aila suggested that the Park do the analysis on the impact of traditional and customary practices within the Park boundaries and staff can look outside the Park. Is the Park willing to do that?

Mr. Scheuer apologized and asked for the question again.

Chair Aila said the Park is asking for designation. Part of the process is testimony and people are asking about traditional and customary practices. So can the Park help answer for us the current or future impacts on traditional and customary practices within the Park

Mr. Hansen said Park could do what has been asked of Keith (HDWS) to do is to define a framework for resource needs to support traditional and customary practices, which is a more difficult and personal question for the local folks. But if the Commission wants the Park to define resource needs or what the Park would like to see for habitat, water levels, and certain flows through the system, the Park can try to do that.

Mr. Scheuer said Park could expand upon those legally reported issues in the petition via the issue raised by Commissioner Antolini that we can expand upon those issues to provide further information by January 30, 2014 and check their networks, increase work with the Water Commission staff to increase

outreach to provide another opportunity for people to bring additional information to the Commission on these matters. We would not like people to analyze the existing process which is what Commissioner Beamer brought up.

Chair Aila said the request is are we ok with that discussion to provide further clarification about the impacts on traditional and customary practices. Maybe the Commission can amend whatever motion it is going to make for additional action.

Commissioner Pavao said he is totally confused (crowd laughter)

Commissioner Antolini tried to clarify her understanding by stating that the analysis of traditional and customary rights will not happen overnight. So to move that process along she suggested with a particular eye on the impacts to traditional and customary practices affected by discharge starting with the Park to provide as much information as they can to develop a framework to provide more information and whatever baseline information the Park can provide the Commission. It's moving the ball along that goes to the issues about the impact of discharge on traditional and customary rights, exercising those rights in the Park, and the analysis of non-consumptive uses to create a road map. That's her summary and she hopes it makes sense.

Chair Aila said it made sense to him.

Commissioner Beamer (inaudible)

Commissioner Pavao summarized they basically need to know the impacts to the Park.

Chair Aila/Commissioner Pavao (cross talk)

Commissioner Starr re-stated his amendment to the original motion concerning the creation of a scope of work, timeline, and funding methodology for an infrastructure improvement plan to alleviate existing source, chloride, transmission, storage, and well interaction issues in the Keauhou Aquifer Area.

Mr. Okamoto clarified that DWS would only do the analysis for their sources and system, which does not include the other 117 private wells in the ground. He asked if Commissioner Starr's request is part of the original motion by Commission Buck to send a project description and scope of work for the revised Keauhou Aquifer Water Use and Development Plan (WUDP) to the Commission staff by January 15, 2015. He agreed with Commissioner Pavao and would like to know how much freshwater is flowing out at the Park right now and what is it that they need. For example, if it's 20 mgd right now does it get bad when it hits 19, 18, etc.? He is concerned that the burden is being put on the HDWS whereas we thought we were doing ok until this Commission came along. So they would like to see what is it they are shooting for, what's within their kuleana and responsibility. We work with Commission staff and is there something HDWS can rely on them for assistance. But HDWS is at the place asking what is it that the Park needs?

Chair Aila said we're not asking for those answers now but mediation may help answer that question. That information is not needed immediately, but need to get the 3 sides together and work something out. He reminded the Commission that we have the last flight out at 9:15p.

Commissioner Starr clarified the amended motion.

- a. Allow the County, National Park Service, and members of the public to submit additional legal and/or factual information to the Commission regarding the petition no later than January 30, 2015, including information about the impact of discharge on traditional and customary practices, exercising those rights in the Park, and the analysis of non-consumptive uses.
- b. Create a scope, timeline and funding methodology for an infrastructure improvement plan to alleviate existing source, chloride, transmission, storage, and well interaction issues in the Keauhou Aquifer System by May 30, 2015.

MOTION: (Starr / Buck)
To approve the friendly amendments.
Aila, Antolini, Beamer, Buck, Starr = yes; Pavao = abstain

Chair Aila called a vote on the motion by Commissioner Buck and the added amendments.

## **RECOMMENDATION:**

In light of the record and proceedings to date, and the Preliminary Findings of Fact, the Commission should extend the investigation and study period by no later than May 30, 2015.

- a. To allow important and ongoing hydrologic studies of the area to be completed and/or analyzed.
- b. Request that the County send a project description and scope of work for the revised Keauhou Aquifer Water Use and Development Plan (WUDP) to the Commission staff by January 15, 2015. Commission staff will provide comments back to the County by February 1, 2015. The County will provide a draft of the revised Keauhou Aquifer WUDP to Commission staff no later than May 15, 2015.
- c. Pending the outcome and the progress of the good faith negotiation between the County and the Kaloko-Honokohau National Historical Park, with participation from Commission staff, to explore alternative paths of action other than ground water designation of the Keauhou aquifer.
- d. Allow the County, National Park Service, and members of the public to submit additional legal and/or factual information to the Commission regarding the petition no later than January 30, 2015, including information about the impact of discharge on traditional and customary practices, exercising those rights in the Park, and the analysis of non-consumptive uses.

e. Create a scope, timeline and funding methodology for an infrastructure improvement plan to alleviate existing source, chloride, transmission, storage, and well interaction issues in the Keauhou Aquifer System by May 30, 2015.

MOTION: (Buck / Starr)

To approve the recommendation.

Aila, Antolini, Beamer, Buck, Starr = yes; Pavao = abstain

Commissioner Antolini asked about the Department of Hawaiian Home Lands (DHHL) reservation requests and the next steps.

Deputy Director William Tam said the reservation requests would be discussed at a separate meeting.

Commissioner Beamer also asked if staff could brief the Commission about other areas experience with designation.

Commissioner Starr encourage future outreach and communication to dispel apprehension and conflict.

Commissioner Buck thanked the public for their patience and attendance.

Chair Aila adjourned the meeting.

Prepared by:

Roy Hardy

GW Regulation Program Manager

APPROVED AS SUBMITTED:

Jeffrey T. Pearson, P.E.

Deputy Director